

RECORDS OF THE PAST

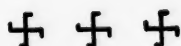
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CHARACTERISTICS OF ROMAN ART

THE Romans possessed a vigorous and keen intellect, excellent judgment, and good taste. They were practical and acquisitive, not idealistic, fitted for action, not for contemplation and science. They distinguished themselves in oratory, in biographic history, in didactic and satiric poetry. They were preëminent in the practical arts of war, law and politics, in engineering and utilitarian architecture. In sculpture they preferred the practical lines of portraiture and historical reliefs. In the sphere of wall decoration and painting they appreciated the architectural style, and, to a less extent, *genre* and landscape pictures.

Their character influenced the method of artistic execution as well as the choice of motifs and departments. They were alert and keen observers. They took an interest in and noted minute personal peculiarities of form, color, facial expression, and action. They believed that personal appearance was a very close indication of character, and facial expressions were an index of the feelings. This characteristic trait is manifest in numerous authors, especially the satirists, for instance Horace and Juvenal; in the writers on rhetoric, who devote special attention to the appearance and delivery of an orator; in the historians, *e.g.*, Suetonius, who describes the personal appearance of almost every emperor in his *Lives of the Caesars*.

They observed also the color, form, and texture of plants, flowers, and fruits, and, to a less degree, the movements and positions of animals. They noticed the location of a scene and its environment.



FIG. 1. ATHENA'S PIPES AND THE FATE OF MARSYAS

Wall-painting at Pompeii

Their natural realism was no doubt developed by an early custom which dates as far back as 300 B.C.: every family of the Roman aristocracy had a colored and lifelike wax mask (*imago*) made of any deceased member who had been curule aedile, praetor, or consul. The masks constituted a patent of nobility (*ius imaginum*), and they gave the people a certain training in recognizing and demanding a characteristic likeness, as photography has done to a high degree since the days of Daguerre.

Throughout the royal and republican periods the Romans were also greatly influenced in the same direction by the Etruscans, who were very diverse in other respects, but required the same uncompromising realism in art.

The Romans accordingly insisted upon the exact representation especially of the head of an individual, whether beautiful or not, upon the naturalistic reproduction of fruits and flowers, upon a definite background and a specific environment, so far as their knowledge of perspective allowed. They desired the fulness of detail which they habitually perceived in everyday life. They admired elegant technique and a high finish. Roman art made its appeal to the intellect rather than to the æsthetic faculty. Its chief aim was not so much to excite æsthetic emotion and give pleasure as to supply a lifelike presentment of great personalities and a vivid idea of

important historic events. When Roman art is comparatively unimaginative, the principal reason is not lack of creative power, but the fact that Roman common sense disdained to indulge in flights of fancy and rejected Grecian centaurs and gorgons and monstrous giants.

Roman artists developed and made large use of the "continuous method," which presented successive actions or scenes with the same background or in adjoining parts of the same field,—an ancient and primitive way of furnishing a moving picture exhibition (Fig. 1). This style prevailed for 1500 years down to the Renaissance, and was employed by Lorenzo Ghiberti on the "Gate of Paradise," and by Michelangelo on the ceiling of the Sistine Chapel. It is not artistic, but in some respects very well adapted for historical illustrations.

In the reliefs of the Arch of Titus the artists of Rome partially soiled the tridimensional problem, or the problem of perspective. In other reliefs



FIG. 2. PORTRAIT OF A GIRL. PERIOD OF HADRIAN

Museo delle Terme

and in painting they were surprisingly successful in mastering linear perspective, when we consider the deficiencies of their optical theories.

In sculpture Roman imperial art first recognized the eye as the organ preëminently expressive of attention, of feeling, and character. It represented the pupil and iris by plastic means, by carving, in place of coloring alone—an improvement that constituted a new epoch in the history of sculpture. In this and other ways it made the faces in statuary more animated and imparted to them a psychological quality, a moral significance unexcelled to the present.

Roman artists represented with sympathetic insight children of different ages and dispositions and social ranks (Fig. 2). They made a great advance not only upon the little brat held by the Hermes of Praxitiles, but also upon the work of Hellenistic sculptors.

Nothing accomplished by the Greeks in their day of highest artistic achievement can be compared with the original Roman decorations of flower and plant life in luxuriant richness, in variety, in a realistic sense of the possibilities of natural objects for the purposes of ornamentation. The Greeks conventionalized plant forms along architectural lines, but Roman realism



FIG. 3. WREATH ON AUGUSTUS' ALTAR OF PEACE

carved them with such fidelity that 14 varieties of fruit may be recognized in one beautiful garland (Fig. 3). The conspicuous plant decoration on walls and furniture, on plate, and in sculpture forms as characteristic a feature of early imperial art as it became afterwards in the art of the Italian Renaissance.

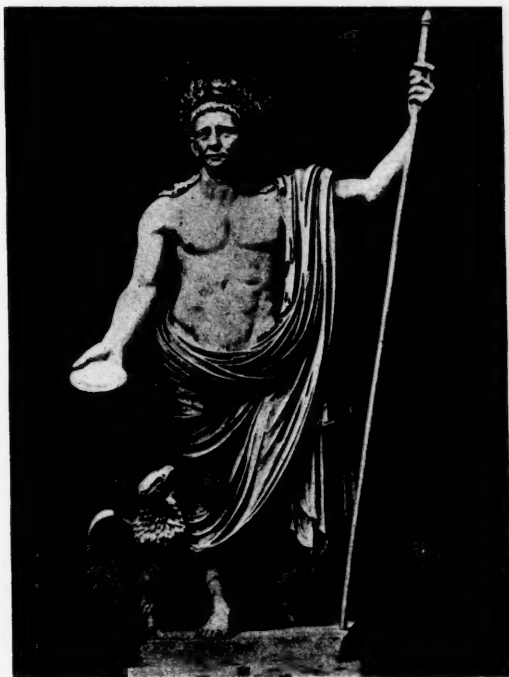


FIG. 4. CLAUDIUS AS JUPITER

Rotunda of the Vatican

In Grecian countries and the East the human form, which had originally been predominant in art, surrendered a great part of the surface to ornament, and finally disappeared. In the West Roman artists at first combined representations of gods and men, but gradually eliminated the divine element, and retained the human form as the chief and dominating idea of art. They were even influential enough to secure its adoption in the service of the Christian religion, which was by precept and tradition hostile to it. In the West, accordingly, this priceless artistic heritage was saved and bequeathed to posterity. As in architecture, so in art, the modern world has admired the idealism, the taste, and the exquisite technique of Athens, but has followed in the footsteps of Rome—the last of the ancient and the first of modern cities.

ROMAN PORTRAIT SCULPTURE

In the course of centuries Grecian art had developed various types of portrait statuary. Roman art adopted a few of them. The subject was at times idealized and represented as a god, for example Jupiter or Hermes, had the attributes of the god, and according to Greek conventionality appeared half, or entirely, nude. He might have some drapery for artistic effect. The head alone would be a portrait, and the body ideal, as in the

famous statue of Claudius as Jupiter (Fig. 4). This combination was a great convenience in the case of statues of emperors, because the imperial heads could be changed with economy and despatch whenever there was a change of emperors. The hair of some portrait busts of women was also made detachable, in order that a coiffure *à la mode* might be supplied as occasion required. It is a remarkable fact that the convention of nude or semi-nude idealized or heroic statues continued down to the times of the American sculptor Greenough, whose Washington is said to indicate with one hand that his bones rest at Mt. Vernon and with the other that his habiliments are in the White House.

In a second style the subject was represented as a mortal in everyday attire or, *e.g.*, as a commander-in-chief. A combination of the two types was possible, and hence we have the bareheaded and barefooted Prima Porta statue of Augustus with the beautiful cuirass (Fig. 5). Full-length statues were regularly life-size or colossal, the latter being reserved almost exclusively for members of the imperial family.

The shape of the busts varied from age to age. In the time of Augustus only the head, neck, and collar bone are represented. By the time of the Flavian emperors the bust includes the shoulders and the pectoral line. During the Hadrianic and Antonine periods it comprises also the upper arms and the lower part of the chest. In the III century A.D. busts reaching to the waist were a common but not an exclusive style.

Greek portraits in general did not possess distinctive individuality, but aimed to realize a type. The purpose of the Greek sculptor was to make a statue artistic and impressive, the object of the Roman was to make it express the character and individuality of the person represented.

The Julio-Claudian art was, however, largely Hellenistic. Many busts and statues were idealized, for example that of the young Augustus. They show more of the Grecian spirit with its high regard for simplicity of line, for beauty of form. They are reserved, dignified, and cold—excellent representatives of the so-called "empire style."

The sculptor of the statue of Augustus from Prima Porta reveals the Italian love of detail, which we find only at times in Greek art, for instance in the well-known mosaic of the "Battle of Issus." The statue is interesting also because it retains many traces of its original polychrome decoration—brown and yellow, blue, pink and red.

In the reliefs of the Altar of Augustan Peace the pupils are in some cases indicated by carving, but this innovation is not employed in statues until the time of Hadrian. The hair is rendered in a simple and natural fashion.

During the Flavian epoch the artists had gained greater mastery of technique and responded with the highest virtuosity to the Roman love of realism. They paid less attention to beauty of line, the modeling became rounder, the planes passed imperceptibly into one another, and a certain illusionistic quality was achieved. The sculptors contrived to seize a momentary yet withal characteristic expression, as a modern photographer aims to do, and, without accumulating superfluous details, they produced wonderfully individualistic and lifelike portraits.

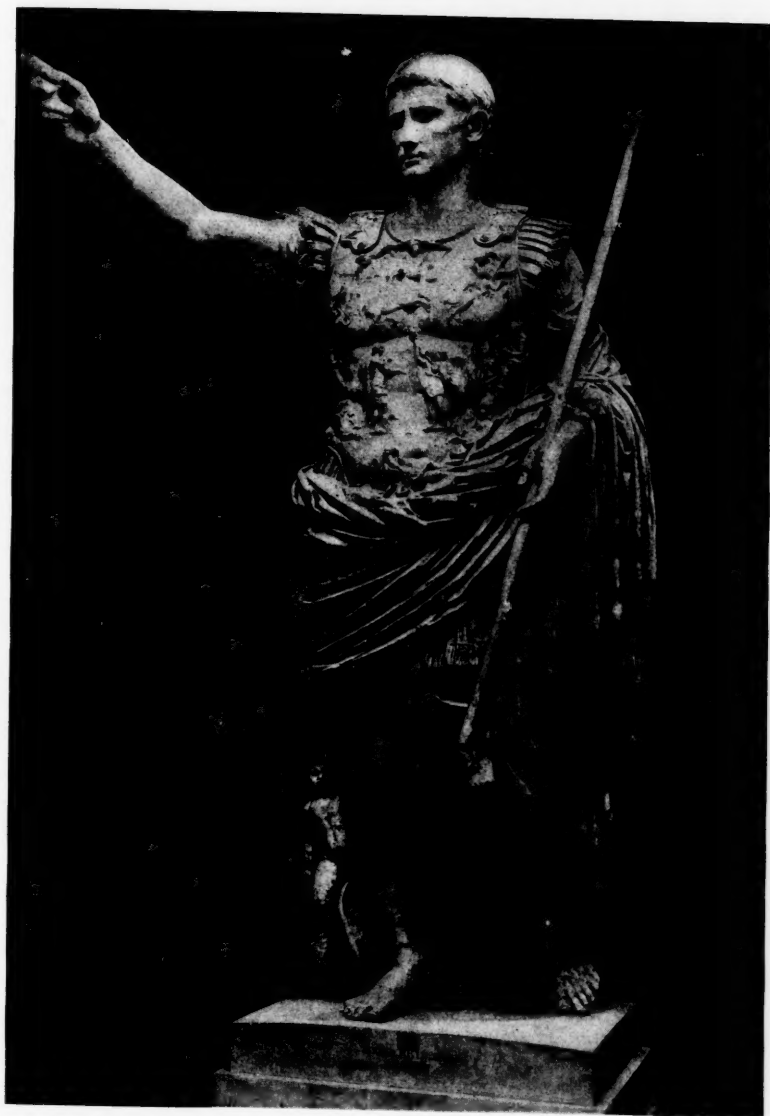


FIG. 5. THE PRIMA PORTA AUGUSTUS

Vatican

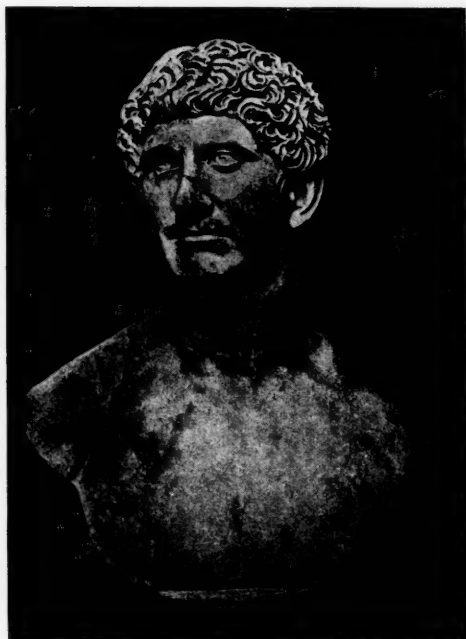


FIG. 6. MARK ANTONY, SO-CALLED

Vatican

The hair of the men was lightly modeled, or, in the case of the "Mark Antony," cut or drilled (Fig. 6). The ladies of the court circles are represented with their hair in front curled in numberless tight ringlets, and supported no doubt on a wire frame. The Trajanic women built up their hair in three stages by means of a stiff metal frame.

In the statuary of the Antonine period the plastic treatment of the eye is further developed. The iris is represented by an incised circle, and within this the pupil is rendered by two small drill holes which reproduce the points of light. In this way the plastic eye can represent the mobility of the natural eye, and the gaze may be directed upwards, downwards, or sideways—not only straight forward as in Greek sculpture. It was this improvement especially that imparted to the Antonine busts a new and extraordinary animation.

In the portraits of Commodus (Fig. 7) and others the skin was highly polished and resembled ivory. This finish was probably a substitute for the color which had been used down to that time. It has been noted for example that in the preceding century (79 A.D.) the numerous statues painted on the walls of Pompeian houses are all represented as colored and not white in imitation of statuary marble. This was another innovation constituting a new epoch, in which modern theory and practice have followed Roman precedent and not the reputed impeccable taste of the Greeks. However, there seems to be no valid reason why pigments delicately applied should desecrate even Parian marble.



FIG. 8. BUST OF CARACALLA

Berlin Museum



FIG. 9. BUST OF PHILIP THE ARABIAN

Vatican

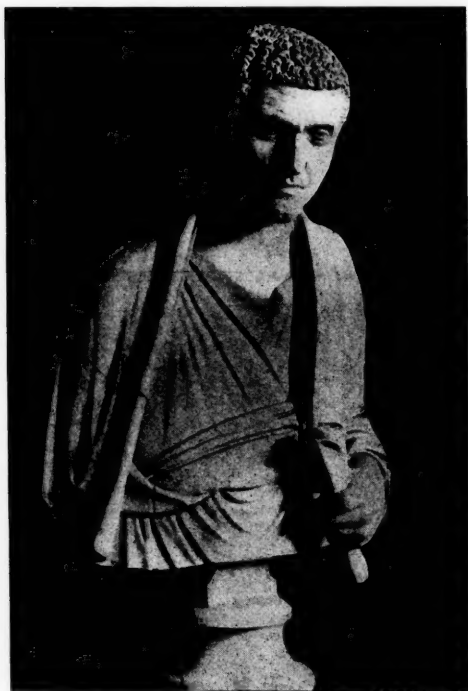


FIG. 10. PORTRAIT OF A MAN. LATE III CENTURY

Strong, Roman Sculpture from Augustus to Constantine

The hair and beard were deeply undercut or drilled. The hair in particular appears to be a mass of deep shadows and high lights. This was a successful attempt to introduce in portraiture the *chiaroscuro*, or coloristic effects, already achieved in other departments of plastic art.

In the busts of Caracalla (Fig. 8) the head is inclined downwards and to the right, the face receives a lively turn to the left, and the glance is slightly raised. The evident aim was to represent a typical tyrant in a moment of passionate anger, and the result is a portrait of marvelous animation and power.

Early in the III century the fashion of clipping the hair and beard quite close was introduced and soon became dominant. The hair was rendered by innumerable fine chisel strokes on a rough surface (Fig. 9). Nevertheless a certain coloristic effect was attained.

When we reach the times of Diocletian and Constantine, great changes have taken place. There is a return to the archaic flatness, or frontality (Fig. 10). Every part of a statue is kept as much as possible in the front plane, the outlines are clear and definite, the drapery is stiff and flat, the face, as in primitive art, is directed rigidly to the front. This

was the beginning of the figure sculpture of the middle ages—with its expressive lines, monumental attitudes, lucid planes, and conspicuous symmetry.

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NOTE: The author desires to acknowledge his special obligations in the two papers on Roman sculpture to the following authorities:

- BURN, ROBERT, *Roman Literature in Relation to Roman Art*. London, 1888.
 BERNOULLI, J. J., *Roemische Ikonographie*. 2 vols. in 4. Stuttgart, 1882-94.
 COURBAUD, EDMOND, *Le Bas-Relief Romain a Représentations Historiques*. Paris, 1899.
 GARDNER, PERCY, *The Scenery of the Greek Stage*, in the *Journal of Hellenic Studies*, vol. 19, 1899, pp. 252-64.
 JONES, H. STUART, *Notes on Roman Historical Sculptures*, in Papers of the British School at Rome, vol. 3, 1906, pp. 213-71, 1905.
 ———, *Art under the Roman Empire*, *Quarterly Review*, vol. 204, 1906, pp. 111-37.
 ———, *Roman Art*, in the *Encyclopedia Britannica*, 11th edition, pp. 474-86.
 LOEWY, EMANUEL, *The Rendering of Nature in Early Greek Art*. Translated by John Fothergill. London, 1907.
 REINACH, SALOMON, *Répertoire de Reliefs Grecs et Romains*. Paris, 1909.
 STRONG, MRS. ARTHUR [Eugénie Sellers], *Roman Sculpture from Augustus to Constantine*. New York, 1907.
 STURGIS, RUSSELL, *The Appreciation of Sculpture*. New York, 1904.
 WACE, A. J. B., *Studies in Roman Historical Reliefs*, Papers of the British School at Rome, vol. 4, 1907, pp. 229-76.
 ———, *Fragments of Roman Historical Reliefs in the Lateran and Vatican Museums*, *ibid.*, vol. 3, 1906, pp. 273-94, 1905.
 WICKHOFF, FRANZ, *Roman Art*. Translated and edited by Mrs. S. Arthur Strong. New York, 1900.



BABYLONIAN, ETRUSCAN AND CHINESE DIVINATION¹

AS A RESULT of a detailed study of Babylonian divination, extending now over a period of more than five years, it may safely be maintained that the endeavor to foresee and, as far as possible, to forestall future events played a very significant and highly important part in the religion of Babylonia and Assyria from the earliest to the latest period. In the course of time the field of divination became so extended as to be almost boundless. Every unusual happening in nature, or in the life of the individual was regarded as an omen, which it was the business of the priests connected with the numerous temples of the south and the north to interpret. Leaving aside certain miscellaneous classes of omens, we may specify three methods of divining the future as the chief ones in use, to wit: (1) Divination through the liver of the sacrificial animal or Hepatoscopy; (2) Divination through phenomena of the

¹In Vol. VI, Pt. II, RECORDS OF THE PAST, Dr. Albert T. Clay presented in an article on *The Liver in Babylonian Divination*, a review of the work Dr. Jastrow had been doing on this subject. Since that time Dr. Jastrow has continued his researches and at the meeting of the Archaeological Institute in Washington, December 28, 1912, he presented a paper summing up the results of his work. This abstract appeared in *Old Penn.* January 25, 1913, but on account of its general interest we are reprinting it with the approval of Dr. Jastrow. For illustrations of the models of livers, and divination texts we would refer to the volume of RECORDS OF THE PAST mentioned above.

heavens or Astrology, including as a supplement the interpretation of storms, thunder, lightning and earthquakes; (3) Divination through signs observed in the young of animals and in newborn infants or "Birth Omens." A significant feature of each of these three methods is the theory underlying in each case. In the case of hepatoscopy, the starting point is the belief—found widespread among people of primitive culture—in the liver as the seat of what the ancients vaguely looked upon as the soul and which included for them the seat of life. The sacrificial animal, when accepted by the deity to which it was offered, was assimilated to the deity, or as we might also express it, the deity in accepting the offering became one with the animal, much as an individual who eats an animal is united with it. The soul of the sacrificial animal thus becomes attuned to the soul or the mind of the deity, and the liver in such a case reflected the mental disposition of the god, as in a mirror, to use a metaphor employed by Plato in describing this very subject of liver divination. Therefore, if one succeeded in reading the liver of the animal sacrificed, one entered, as it were, into the mind of the god who had accepted the animal.

In the case of divination through phenomena in the heavens, more particularly through the observation of moon, sun and the five planets, together with a number of constellations and significant stars, the underlying theory rested on a supposed correspondence between occurrences in the heavens and phenomena on earth. This correspondence was the natural consequence of the view that moon, sun and the five planets (whose motions were observed at an early period) represented deities; and since, according to the current view, whatever happened on earth was due to the gods, the movements observed in the heavens were naturally interpreted as the activity of the gods preparing the events that were to happen on earth.

In the case of birth omens, we must seek for the underlying principle in the mystery attached to the beginning of new life, a feeling that gives rise also to the manifold ceremonies observed among primitive people in connection with a birth. If we add to this principle the very natural thought that anything unusual connected with the mysterious beginning of a new life—due, as everything else, to the gods—portended something of an unusual character, we have the two factors which suffice for our purposes in accounting for the importance attached to all kinds of anomalies observed in young animals and in infants.

A large division of the famous library of Ashurbanipal, so far as recovered consists, as a matter of fact, of several thousands of tablets comprising omens covering the three fields mentioned (apart from miscellaneous omens), together with the interpretations proposed for them. Abundant specimen texts will be found in the second volume of the author's, *Religion Babyloniens und Assyriens*. I need not, therefore, stop to discuss these texts on this occasion, but will pass on to the consideration of the cultural significance of this large field of Babylonian divination.

The evidence may now be considered satisfactory for the thesis that from the Euphrates Valley, as a center, an elaborate system of divination through the liver, spread to Asia Minor and reached Italy and Greece. In Italy it was the Etruscans who introduced Hepatoscopy, and since the

Asiatic religion of the Etruscans is now pretty generally accepted, we may conclude that the Etruscans brought the system with them from an earlier home somewhere in Asia Minor. At all events, the discovery of the famous Bronze Liver of Piacenza, in 1877, forming a complete parallel to a clay model of a liver with cuneiform characters, found near Bagdad and dating from the Hammurabi period clinches the question. Both objects are models devised for instruction in divination through the liver in the priestly schools of Babylonia and Etruria, respectively; and the points of agreement between the two models leave no doubt as to a direct relationship between Babylonian and Etruscan methods of liver divination. Similarly, the finding of models of clay livers with cuneiform inscription on the site of Boghaz-Keui—an important ancient Hittite centre—conclusively shows the early spread of this system of divination among the Hittites and far to the north.

For the spread of astrology through Babylonia and Greece, after the time of Alexander the Great, we now have a chain of evidence recently completed by Professors Bezold and Boll, who have shown that many statements in Greek astrological codices revert directly to a cuneiform original; and since, in both Greece and Italy, we find astrology by the side of liver divination, we are permitted to conclude that in Italy likewise the introduction of astrology is due to Babylonian influences. This is confirmed not only by statements in classical writers, who currently used the term "Chaldean Wisdom" for divination through the starry heavens, but also through striking parallels between what Thulin calls the Etruscan "Blitzlehre" and the storm, thunder and lightning omens found in the collections of Babylon-Assyrian priests. I may be permitted to refer for details to my remarks in volume 2, page 742 seq., and also pages 703 seq. of the *Religion Babyloniens und Assyriens*.

In the work just referred to, volume 2, pages 937-945, I have also summed up and put together evidence which, while not abundant, is yet sufficient to indicate that the system of Babylonian birth omens likewise made its way to Asia Minor and to the Etruscans. Cicero is our authority (*De divinatione*, I, 41-42) for the statement that the Etruscans were particularly skilled in the interpretation of all sorts of malformations (*monstra*) among men and animals. Arnobius and Livy confirm Cicero's point of view, and the explanation as the basis for this system of divination given by Cicero, "as phenomena which point to unusual occurrences about to happen," is itself sufficient proof of the agreement of the Babylonian and Roman viewpoint in regard to malformations and anomalies noted in the young of animals and in infants.

In this brief extract I cannot stop to consider the view of the Babylonian birth omens in accounting for the widespread conception of fabulous beasts like hippocentaurs, and such beings as satyrs, fauns, tritons and mermaids, but must content myself with the suggestion elaborated elsewhere, that such suppositions are merely fanciful elaborations of all sorts of supposed resemblances between one animal and another or between a human being and an animal reinforced by the observation of all kinds of anomalies and malformations.

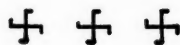
The evidence for the spread of Babylonian divination to the extreme East is not as definite. We have some striking parallels between Babylonian and Chinese systems of astrology, which are discussed by me in volume 2, pages 745-748, of the work above referred to. Birth omens, we know, likewise played an important part in the Chinese religion, and Professor de Groot has recently expressed the opinion that the divination lore of China impresses him as a foreign importation. If that be so, we would be justified in regarding Babylonia, the oldest center for all three systems, as the ultimate source. Professor Boll, in a paper read before the International Congress of Orientalists at Athens, in April, 1912, definitely proved the western religion of the Chinese Zodiacal system. To be sure, Professor Boll believes the connecting link between China and the West for the spread of the Zodiac is to be sought in the centuries immediately preceding our era, but granting that the connection has been established, more substantial reasons exist for assuming a much earlier relationship between China and the West.

For liver divination in China, Frau v. Bartels, in her recent monograph, *Die Bronze Leber von Piacenza in ihren Beziehungen zu den acht Kwa der Chinesen*, believes to have found direct evidence of the spread of Babylonian hepatoscopy to the distant East. While I cannot follow the learned authoress in all of her ingenious deductions, I am inclined to believe that her main thesis of a direct connection between Babylonia and China in this respect has been made plausible and is at all events worthy of serious consideration on the part of scholars.

Here we must wait for the publication of further material, and it is to be hoped that some Sinologist will take up this theme and make accessible to non-Chinese scholars a portion at least of the vast material dealing with omens of all kinds as practiced for so many centuries among the Chinese.

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KILNSEA CHURCH IN 1829

THE LOST TOWNS OF THE YORKSHIRE COAST¹

IN GLACIAL times Scandinavian ice crossed the North Sea and extended a number of miles beyond the border of the Yorkshire coast, leaving a terminal moraine of large size. On the retreat of the ice, this moraine formed the border of Holderness from the rocky prominence of Flamborough Head to the mouth of the Humber, a distance of about 30 miles. Being thus of unconsolidated material, the coast has been subject to rapid erosion by the sea. Only one or two headlands of rock stand out in all that line of coast to mark the original boundary. Throughout the whole distance from Bridlington to Spurn Head the coast is wearing away at the rate of 7 ft. per annum, but at the south end the projection at Spurn Head has been lengthened and enlarged by the detritus washed along the shore, while large additions have been made by deposit from the River Humber some distance above its mouth. As a consequence, sad havoc has been made with many flourishing villages and cities which were built near the coast. There are records proving the almost total disappearance of at least 8 villages from the eastern shore, some of them of considerable size and importance. One, Ravensburg (or Ravenser), was at one time "one of the most wealthy and flourishing ports of the kingdom. It returned two members of Parliament, assisted in equipping the navy, had an annual fair of 30 days, two markets a week, is mentioned twice by Shakespeare (*King Henry VI*, pt. iii, act iv, scene 7; and *Richard II*, act ii, scene 1) and considered itself honored by the embarkation of Baliol with his army for the invasion of Scotland in 1332; by the landing of Bolingbroke, afterwards Henry IV, in 1399; and by the landing of Edward IV in 1471,

¹ *The Lost Towns of the Yorkshire Coast, and other Chapters bearing upon the Geography of the District.* By Thomas Sheppard, F.G.S., F.R.G.S., F.S.A. (Scot). Pp. xviii, 329. Fully illustrated. 7s. 6d. net. London: A. Brown and Sons. 1912.

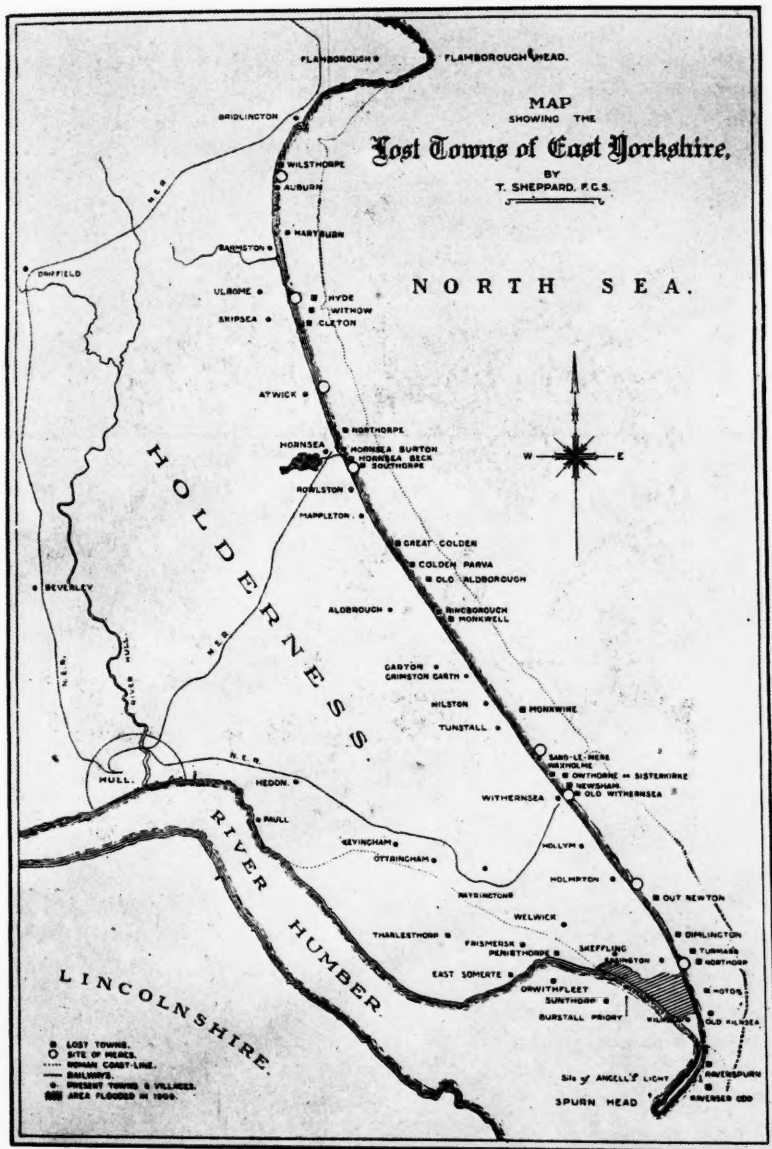
not long after which it was entirely swept away." Today, we cannot even be certain where the place was. It is doubtless near this spot, on the extreme end of the promontory that the Danes landed in 867, and planted their standard "the Raven."

Ravenser-odd was a Danish settlement built upon an island near Ravenser, which had a representative in Edward III's naval Parliament in 1344. In 1360 it was totally annihilated by the floods of the Humber and the inundations of the great sea. A short time before, however, the bodies in the chapel yard, which were being washed away, were removed and buried in the churchyard at Easington. Notwithstanding this "in the Hedon inquisition of January, 1401, the chapel of Ravenserodde, with the town itself, was declared to be worth, in spirituality, more than £30 per annum" (p. 96).

To escape destruction Aldborough was moved 2 or 3 miles inland, the original site of the town having been washed away. The stones of the front part of the church containing some Saxon relics were removed and built into the present structure for preservation. One of these relics is a circular sun dial built into the inside wall up side down. At Withernsea, groynes were built so as partially to stay the wash in recent times, but early in the XV century the churchyard was washed away and the present structure erected some distance from the shore. The old church is thought to have stood "at a point now covered by the sea, and about a mile due east from the corner of the inn now known as the 'Commercial'" (p. 137).

At Roos Carrs some workmen in clearing for sewers or drains came across what is supposed to be the earliest evidence of Scandinavian occupancy. They were figures carved from wood with quartz pebbles for eyes. The locality in which these were found is near Withernsea, marking the bed of a small stream which had furnished a harbor for small fishing boats. At Hornsea Burton, the cliff is wearing away at a rate of 7 to 13 ft. per year. In 1609 it was reported that in the previous 80 years 39 houses and 39 closes had been washed away, thus greatly reducing the rents of the place. At Skipsea large pieces of amber used to be found as the cliff was washed away. Near here, also, a peat deposit was exposed in what was formerly the bed of a glacial lake, while near by were found remains of pile driving and many important relics of the stone and bronze ages.

Westward towards the Humber instead of a loss of land there were, as we have said, extensive additions. While 774 acres were lost on the seaward side of Holderness, between 1848 and 1893, 2178 had been added or reclaimed upon the Humber side. "The once flourishing seaport of Hedon, which sent 3 members to Parliament, and still possesses valuable corporation plate, including the oldest mace in the country, is now a quiet country town of a thousand inhabitants. It is today some 2 miles distant from the Humber, though the old docks and waterways can still be traced in grass fields. Its official seal—a sailing ship manned—seems to be all there is bearing upon its one-time connection with the sea. A narrow meandering creek at high tide now allows small craft to approach a town which once supplied ships and men to the king's navy" (pp. 52, 54).





THE OLD KILNSEA CROSS, FROM CHILD'S ORIGINAL DRAWING, 1818

Courtesy of Yorkshire Archæological Society

Hull itself has an interesting history partially recorded in the topographic changes which have taken place within its walls and its immediate vicinity. In the earliest times what is now the River Hull had two mouths, the "Old Town" itself being built upon the delta between them. During the civil war in 1642, by a series of sluice-gates connecting the Humber and the Hull, the entire surrounding country was flooded. Originally before the days of King Edward I the site of the city was occupied by a small villa called Wike. In mediæval times it became a moated stronghold. The present docks of the city are built upon the site of the old wall and moat.

Spurn Point is the one high point on the coast which has grown instead of being wasted away as other places exposed to the washing of the sea have

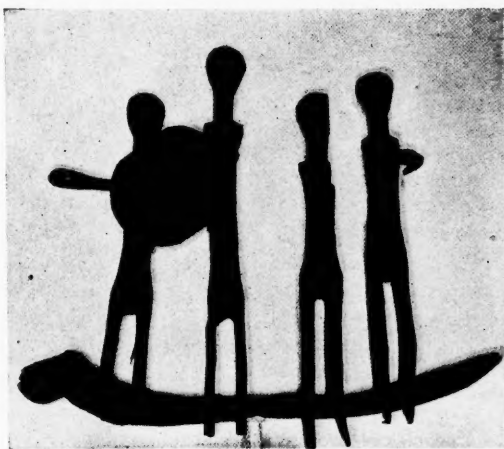
been. This is due to the meeting at that point of the waters of the Humber with those of the sea. As early as the VII century we have references to this promontory. "Wilbrord, the great apostle of the Frisians, was born in Yorkshire in 657 or 658. His father, whose name was Wilgils, late in life betook himself 'to the promontories which are encircled by the ocean sea, and Humber River,' where he remained to the end of his days 'in a little oratory dedicated to the name of St. Andrew the apostle of Christ.' His fame became noised abroad, and he was reported to have wrought miracles. Many resorted to his cell and the king gave him 'as a perpetual gift' certain small patches of land adjoining the promontory that a church might be built there. On his death his bones were laid in his 'sea-side cell'" (p. 72).

Not only does the topography of Holderness speak in eloquent terms of its early history but we have important historical data in the names which are attached to the region. The shire of York was once a part of Northumbria. The ending "shire" is derived from the Anglo-Saxon *scir* indicating that it was originally a share or division which made up one of the early Saxon kingdoms and indicating also its Saxon origin. "Yorkshire is unique among the English counties in being divided into Ridings, namely, the East, North and West Ridings." "The word riding is a corruption of 'thriding' the old English form of thirding and is now used exclusively in this connection. The loss of the 'th' is due to the mis-division of the compound word, as 'North-thriding,' 'East-thriding'" (p. 12).

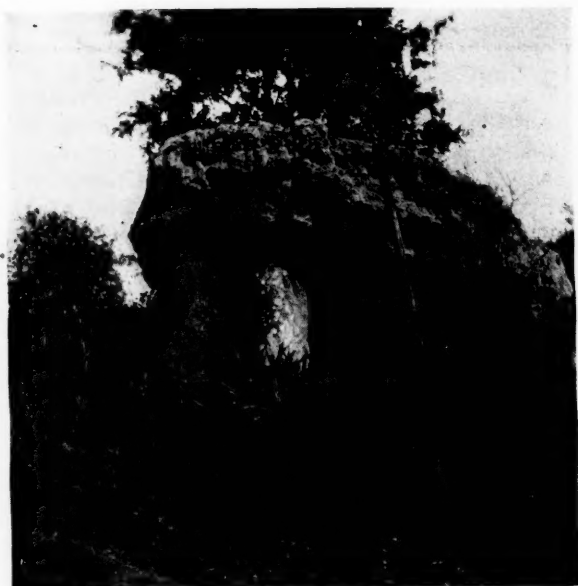
Thus does Professor Shepard give great interest to a subject which at first sight would promise to be of little historical value. All who are interested in the book of nature will be greatly impressed with the object lesson which Holderness presents in illustration of the fact that her work is never done but is always in process of doing, and that history and natural history are inseparably joined.

FLORENCE B. WRIGHT.

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THE PRE-VIKING IMAGES FROM ROOS CARRS



LA PIERRE LEVÉE, PORTIERS, FRANCE

THE "PIERRE LEVEE," POITIERS, FRANCE

AMERICANS who visit Poitiers to inspect the cathedral and other interesting churches and remains of antiquity should not omit the oldest of all of them—the dolmen known as the "Pierre Levée." There is no difficulty in reaching it as tramcars go from the Hotel de Ville to a point very near it in about 20 minutes. They pass the front of the prison and the dolmen is at the back of it in a garden at the corner of two roads.

There are the remains of 7 stones forming originally the walls of a chamber, probably sepulchral, 10 ft. wide from northwest to southeast and 7 or 8 ft. from northeast to southwest. The roof was a single stone which is now about 15 ft. in extreme length and breadth, but a further length of 4 ft., apparently broken off, lies on the ground at its northeast end. Two of the supports at the southwest end are from 5 to 6 ft. high but those at the northeast have fallen and let that end of the capstone down to the ground so that without excavation it is not possible to say whether another chamber exists there or not. The capstone is nearly 3 ft. thick and on the top of it, near the north corner, are a rather remarkable boss and ridge.

A. L. LEWIS.

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REMAINS OF THE OLD NORTH AND LATE WEST TEMPLES. ANU-ADAD TEMPLE

AŠŠUR AND NINEVEH¹

AŠŠUR

OF ALL the little explanatory verses on the Old Testament there are probably but few which are of greater interest than that referring to the great cities of Assyria. It is that well-known verse 11 of the tenth chapter of Genesis, which, in the Revised Version, tells us that, "out of that land (Shinar or Babylonia) he (Nimrod who is best identified with the Babylonia god Merodach) went forth into Assyria, and builded Nineveh, and Rehoboth-Ir, and Calah, and Resen between Nineveh and Calah (the same is the great city)." Whether it was Asshur or Nimrod who went forth from Babylonia or not is a matter of but minor importance, as it is the cities which were founded, and not the person who founded them with which we have to deal.

A very important testimony to the great size of Nineveh is given in the Book of Jonah, where it is spoken of, in verse 2 of the third chapter, as "that great city," and further, in the third verse of the same chapter, as "an exceeding great city, of 3 days' journey," the distance referred to being commonly regarded as indicating its extent. Naturally, there is some difficulty in estimating this from such a vague statement, for, admitting that the words are correctly applied, the distance traversed must necessarily depend on the speed of the traveler. Perhaps a preaching-journey, such as that upon which the Prophet Jonah was engaged, was slower than an ordinary one, but taking as a rough estimate 10 miles a day, this would make about 30 miles as its greatest extent. Between Nineveh and Calah, however, there is nothing like this distance, so that another explanation will have to be found.

¹Read at a meeting of the Victoria Institute, March 7, 1910, and reprinted from their Journal of Transactions.

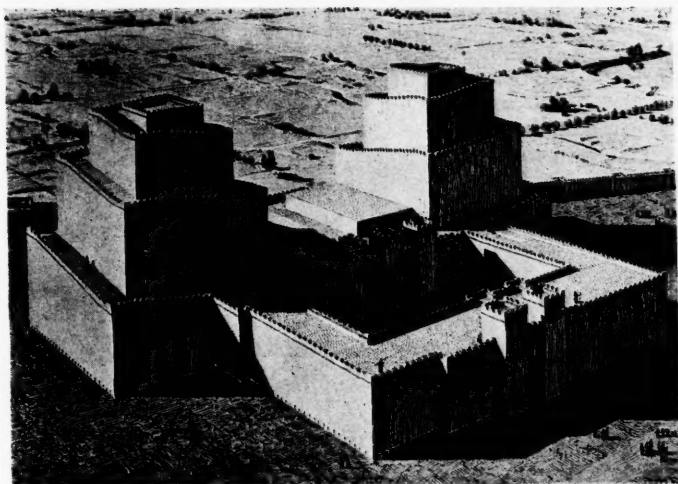
But though I shall refer, later on, to the size of Nineveh, the primary object of this paper is to describe the recent discoveries there and in the old capital, Aššur—a site which, strangely enough, seems not to be referred to in the tenth chapter of Genesis at all. Aššur, however, was a city of considerable extent, and, as the older capital, and the center of an important branch of Assyrian religious life, a place of considerable importance. Situated between 40 and 50 miles south of Kouyunjik, the ancient Nineveh, Aššur, which is now called Qal'a Shergāt, was first excavated by the late Sir Henry Layard, in 1852, when some fragments of the great historical cylinder of Tiglath-pileser I, with a few other objects, were found. Excavations were continued on the site in 1853, when other copies of the cylinder were discovered. One of the largest objects recovered at that time was the black basalt headless statue of Shalmaneser II, the king of the Black Obelisk, who came into contact with the Syrian League and Ahab, and received tribute from Jehu, son of Omri.

The date of the foundation of the city is naturally unknown to us, but it was in existence as early as 2000 years B.C., as Hammurabi testifies. He speaks of having "restored to the city, Aššur, its good genius," suggesting that the place had passed through a period of depression—in any case, whatever the misfortune was, Hammurabi would seem to claim to have remedied it.

The German excavations at Aššur, the city to which the eyes of English explorers had for long been turned, have added much to our knowledge of Assyrian history. About the time of the Babylonian king Abēšu, or Ebišu, ruled viceroy Ušpia, who seems to have been the founder of the temple of Aššur in the city of that name.

This ruler was succeeded by Kikia, after whom came Ilu-šuma and his son Ērišum, both of whom were known, from bricks brought from the site by Sir Henry Layard, to have been viceroys of Aššur (*iššak Aššur*). Ērišum built anew the temple of Aššur, which was called Ē-hursag-kurkura "the house of the mountain of the lands," but in the course of 179 years it fell into ruin, and was rebuilt by Šamši-Adad, viceroy of Aššur. Ikunum, who reigned after Ērišum, rebuilt the temple of the goddess Ereš-ki-gal, the Queen of Hades so often referred to in the account of the Descent of the goddess Ištar to that region. At this early date the records are mainly architectural, but it is to be expected that something more of the history of the country may come to light, though as the viceroys of Assyria seem to have been under the suzerainty of Babylonia, their natural warlike nature would be somewhat hidden. It seems to be only when they became kings in their own right that those long and often tedious but exceedingly valuable historical records, giving details of their conquests, and recounting their relations with the countries around—relations generally the result of those conquests—meet our wondering gaze. The Assyrians seem not to have engaged in military exploits for the mere lust of conquest, but because they were ambitious, and wished to hand down their names to posterity as more renowned than any ruler who had preceded them.

According to Mr. Hormuzd Rassam's account, the site of Qal'a Shergāt, as Aššur is now called, is unlike that of the ruin-mounds of other Assyrian



THE TEMPLE OF AŠŠUR-RÊŠ-IŠÎ AT AŠŠUR. RESTORATION BY ANDRAE

ian cities. Instead of standing out boldly and distinctly from the natural and artificial hills around, it is comparatively flat, the greater portion being simply a gradual slope upwards from south to north. When approaching it from the south or southeast, therefore, nothing can be seen except the ruins of the great temple-tower, Ê-hursag-kurkura, the lower boundary being simply a continuation of the natural hills at those points. Viewed from the north and northwest, however, the platform upon which the city is built has the appearance of a structure towering almost perpendicularly to a height of about 100 ft. above the level of the plain.

It is at the northeast corner of the city-enclosure that the temple of the god Aššur, founded, apparently, by Ušpia, lies; and immediately adjoining it is the palace of Shalmaneser I (about 1330 B.C.) and another small temple. The great *ziggurat* or temple-tower lies a little farther to the W.S. W. Still farther to the same point is the palace of Aššur-nasir-âpli (885 B.C.), and W.S.W. of that again, lies the most noteworthy ruin of the place, namely, the temple of Anu and Adad—the well-known god of the heavens and his son, Hadad or Rimmon, the god of the atmosphere. The westernmost erection is the terrace of the new palace of Tukulti-En-usâti (Tukulti-Ninip) I (1300 B.C.), which seems to have been a building of considerable extent. Among other erections may be mentioned the temple of Nebo, built—or more probably rebuilt—by Sin-šarru-iškun, the Saracos of the Greeks, under whom the fall of Nineveh and the domination of Assyria took place. This foundation contained a treasure-house of the goddess Tašmêtu, the spouse of Nebo. Another important building on the site was a temple to the goddess Ištar, who seems to have borne the name of Ninaittu. Numerous private houses and graves, some of them excellently constructed vaults, with terra cotta coffins, have been found. Of the smaller antiquities some examples have been published, but bas-reliefs

similar to those found in such numbers at Nineveh and Khorsabad, are rare or non-existent. Concerning certain royal figures and stele I shall have something to say later on.

From the photographs which have been published it is satisfactory to notice that Mr. Rassam's description of the ruins is correct—the great *ziggurat* or temple-tower is the only thing appearing prominently above the surface of the ground. Notwithstanding the interest of this structure I am compelled to leave it for the present, as I have not sufficient material for a good description of it. Later on, when a detailed account with restorations, similar to that treating of the temple dedicated to Anu and Adad, which has been so well described by Dr. Andrae, the chief explorer of the site, has appeared, I hope to return to the subject.

Though it is somewhat surprising, we probably know more about the comparatively worse-preserved temple of Anu and Hadad than about the great *ziggurat* which was, in the days of its supremacy, such a prominent feature of the city. But the temple to these two gods is so interesting that a special monograph concerning it has been written by Dr. Andrae, the Director of the excavations, and it is on this account that the description which I am about to give of it is possible.

The lowest structures of the Anu-Adad temple are of Aššur-rêš-iši, who was the ancient builder, if not the founder, of this double shrine. This ruler, who was the father of the well-known Tiglath-pileser I, records his name on the bricks which his builders used, as follows:

(1) *Aššur-rêš-iši* (2) *šangu Aššur* (3) *âpil Mutakkil-Nasku* (4) *šangu Aššur* (5) *âpil Aššur-dan* (6) *šangu Aššur-ma, banu bît Addi* (8) *u Anim.*

"Aššur-rêš-iši, priest of Aššur, son of Mutakkil-Nusku, priest of Aššur, son of Aššur-dan, priest of Aššu, likewise, builder of the house of Adad and Anu."

This inscription is not produced by means of a brick stamp, but is written by hand, probably with a rectangular stick of wood, a corner of which, pressed into the clay, forms the wedges—no matter what their shape—with which we are so familiar. The words are all usual ones, and the text is composed with a due regard to the rules of Assyrian grammar, as far as their ideographic system allowed. It is noteworthy that, in this and other inscriptions found on the site, the name of Adad precedes that of his father Anu—whether because he was the more popular god, or for some other reason, is uncertain.

Like all the structures of this class in Babylonia and Assyria, the corners of the buildings are directed, roughly, towards the cardinal points. Its rear looked therefore towards the northern city-wall, which sloped from northeast to southwest, and its front towards the southwest, facing the central portion of the city. The temple proper seems to have consisted of a rectangular terrace with its entrance on the site referred to, flanked by two towers, by which one gained access to a central court-yard, and thence into the rooms where the religious ceremonies were performed, the priests' private rooms, and those wherein the holy vessels and utensils were kept. As it was a double temple, the architects arranged the rooms in each portion symmetrically, and each god had the same number of rooms in the fane

dedicated to him—4 small rooms arranged round a central chamber which was apparently the sanctuary. The broad recess at the northwestern end of each hall suggests that at that end lay the holy place, where the image of the god of the fane stood, and the priests performed their ceremonies. On each side of these rooms, at the angles of the northwestern front, were two massive temple towers, which Dr. Andrae supposes to have been in 4 stages, access being gained to them from the terrace, and also, probably, from a corridor which ran between the chambers (dividing the temples from each other), or from the chambers themselves. Though no sanctuaries are shown at the tops of these temple-towers, it is not improbable that there was one in each case similar to that of the temple of Belus at Babylon. It is to be noted, however, that a sanctuary at the top of every temple-tower was not an absolute necessity, as the ceremonies may have been performed in the open air. Dr. Andrae's restoration of the earlier structure, which I now describe, does not represent the outer walls as being decorated with those deeply-recessed panels which are such a characteristic of structures of this kind, both in Assyria and in Babylonia. As will be seen later, however, this decoration was employed in the later structure.

It is needless to say that brick structures such as these were constantly needing repairs, and the successors of the builders were accustomed to regard it as their duty to carry them out. Tiglath-pileser I, the son and successor of Aššur-rêš-iši, fulfilled this task with great thoroughness, and records it in detail on his great cylinders, now preserved in the British Museum, and published in the *Cuneiform Inscriptions of Western Asia*, Vol. I, Pl. 15, l. 60 ff. This king states that the temple tower was built or founded by Šamši-Adad, viceroy of Aššur, about 1821 B.C., It had been demolished by Aššur-dan, who ruled about 1200 B.C., but this king had not been able to rebuild it. For some reason, which does not appear, Tiglath-pileser does not refer to the work of his father Aššur-rêš-iši perhaps he only began the work towards the end of his reign, and Tiglath-pileser may have had the superintendence of it for he expressly states that it was at the beginning of his reign that the gods ordered their dwellings to be rebuilt. He then made the bricks, cleared the site, reached the core, and laid the foundation upon the ancient nucleus—brickwork first, and then blocks of stone. He built it, he says, from its foundation to its battlements, and made it larger then before, and he rebuilt also the two great temple-towers, which were adapted to the dignity of the two gods' great divinity. Here it may be noted that translations similar to this were made before the discovery of the site, so that, if there were any doubt as to Assyriologists having found out the way to translate the wedge-written inscriptions, the temple of Anu and Adad would, in itself, suffice to prove beyond a doubt that the renderings were correct. The interior of the two-fold temple, he says, he made bright like the center of the heavens, decorating its wall like the glory of the rising of the stars. Having founded the holy place, the shrine of their great divinity within it, he caused Anu and Adad, the great gods, to enter there, set them in their supreme seat, and thus gladdened their hearts.



PAVEMENT BEFORE THE LATER ASSYRIAN GATE AT THE EAST CORNER OF THE ANU-ADAD TEMPLE

After a description of the *Bīt hamri*, which seems to have been the treasure-house attached to the temple, or to one of the two shrines (that of Adad) which it contained, Tiglath-pileser calls upon the gods whom he had thus honored to bless him, and hear his supplication, granting fertility and plenty to his land, and in war and battle bringing him safely back, etc. He states that he had performed the usual ceremonies, anointing the memorial-slabs of Šamši-Adad, his father (ancestor), with oil, sacrificing a victim, and then restoring them to their place. He asks that the future prince, when those temple-towers grew old and decayed, might treat his own inscription in the same way, and calls down a deadly curse, and all the displeasure of his gods, on any who should destroy his inscriptions. Tiglath-pileser's own inscriptions, impressed on the bricks of the temple, read as follows:

Tukulti-âpil-êšarra
šangu Aššur mâr Aššur-rêš-iši

šangu Aššur bīt Adad bêli-šu

êpuš-ma iksir

Tiglath-pileser,
priest of Aššur, son of Aššur-rêš-
iši,
priest of Aššur, the house of Adad,
his lord,
he has (re)built and paved.

Time passed, and though the temple was in all probability repaired as occasion required by the successors of Tiglath-pileser I, it had reached such a state of decay by the time of Shalmaneser II (859 B.C.) that that king thought himself justified in rebuilding it. It will be remembered that Shalmaneser II was the king who came into conflict with the Syrian league, to which Ahab of Israel and Ben-Hadad of Damascus belonged. Inscriptions on what are called *ziqati*, found on the site, record the work which he executed on the temple as follows:

"Shalmaneser, king of Assyria, son of Aššur-nasir-âpli, king of Assyria."

[Here follow references to his conquests in Armenia, the West, Babylon, and the sacrifices which he offered in Borsippa, the renowned suburb-city of Babylon, of which he speaks also elsewhere. As the cradle of their religion, Babylonia, and especially the capital and the cities around, must have been a land of veritable romance to the pious Assyrian.]

"In those days the temple of Anu and Adad,
my lords, which earlier Tukulti-āpil-ēšarra (Tiglath-pileser),
son of Aššur-rēš-iši, son of Mutakkil-Nusku (had rebuilt), had fallen
into ruin,

to its whole extent I built it anew.

I brought beams of cedar, (and) set them for (its) roof.

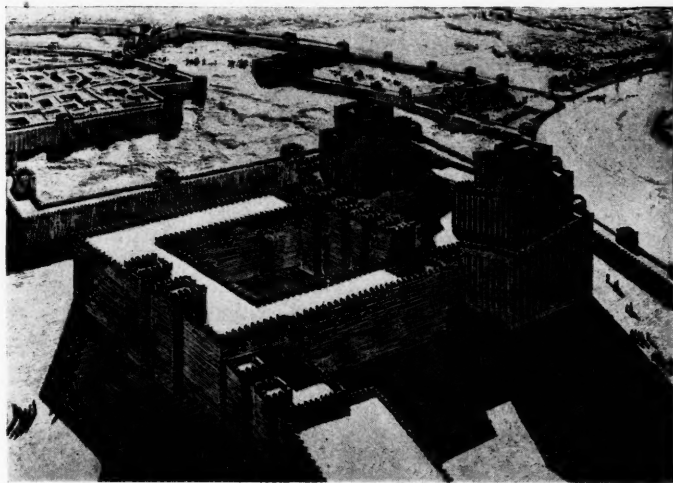
Let the future prince renew its ruin,

restore my written name to its place—

Aššur, Anu, Adad, will hear his prayer.

Let him restore my *ziqati* to its place.

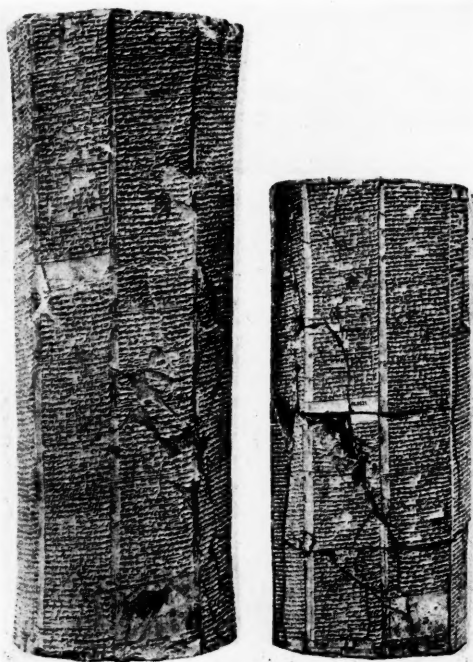
Month of Mahur-ilanī, day 5th, first year of my reign (or possibly of
my 20 expeditions).



SHALMANESER II'S TEMPLE AT AŠŠUR. RESTORATION BY ANDRAE

From this we gather, that the restoration of the temple of Anu and Adad by Shalmaneser II was no mere work of simple repair, but a rebuilding of the structure, as, indeed, Andrae's plans indicate. The halls and rooms were to all appearance decorated with all the skill of the Assyrian artisans, and cedar, probably from Lebanon or Amanus, was used for the support of the flat roof of the outer structure. Contrary to what we should expect, the temple, when rebuilt, was smaller than the structure erected by Aššur-rēš-iši, the father of Tiglath-pileser I. The design, it is true, was more symmetrical but as the new structure was wanting in breadth, it must also have been wanting in boldness. The entrance seems to have been to the left of the center of the terraced front elevation, and the central court-

yard was smaller. It was from this last that access was gained to the rooms used for the ceremonies and for the furniture of the temple. Passing through extensive vestibules, the visitor reached the main halls, which instead of recesses regarded as holy places (which were probably separated from the main halls by curtains), were provided with side-rooms on the right and left of the halls to which they belonged respectively. The two *siq-qurrāti*, to which access was probably obtained from the terrace above the chambers, were towers in stages similar to those of the earlier structure, but their outer walls were panelled, not plain. A fine view of the river to the northwest must have been obtained from these heights. The absence



THE TIGLATH PILESER PRISMS IN THE BRITISH MUSEUM

of formally straight lines in Dr. Andrae's restoration is not altogether unpleasing, and is, in fact, in accordance with the picture on the grant of land obtained for the proprietors of the *Daily Telegraph* by the late George Smith, and now in the British Museum. The carving on the stone in question is very rough, and the details are not, therefore, very marked, but it may be noted, that the shrine on the top is very distinctly shown, suggesting that similar erections may have existed on the similar buildings in the city of Aššur. After this, the restorations of Assyro-Babylonian temple-towers in Perrot and Chipiez's *History of Art in Chaldea* strike one as being rather formal.



VIEW OF THE ANU-ADAD TEMPLES FROM THE NORTHWEST

Among those who repaired and restored the structure at a late date, Dr. Andrae mentions King Sargon of Assyria, the well-known ruler who captured Samaria. In Shalmaneser II's courtyard (which has, by the way, a very good well in the southwest corner), an excellent pavement of tiles almost exclusively of Sargon was discovered. The inscriptions thereon were in two languages, Assyrian and dialectic Sumerian, and read as follows:

"For Aššur, the father of the gods, his lord,
Sargon, king of the world, king of Assyria,
magnate of Babylon, king of Sumer and Akkad,
has caused this pavement to be laid, and with bricks of the sacred oven,
the pathway of the court of E-hursag-gal-kurkura
he has made bright like the day."

This "pathway" finds a parallel in the festival-street at Babylon, and was probably for the processions of the gods when their statues were carried round to visit other shrines and temples, both of the city of Aššur and the neighboring towns.

One of the pictures published shows the entrance to the room designated *F*, looking from the courtyard. Before it is the pavement of Sargon, and below that, the older pavement. The earthen vessel near the center is said to be a collecting vase, possibly for offerings.

The desolation which this once flourishing town and temple present may be gathered from the general view from the east, showing the remains of the old north and the late west temple-towers. On the left are the lowest foundation-courses of the courtyard-wall, and in the middle are the remains of walls of some of the rooms. The remains of the late west temple-tower are to be seen behind.

Naturally there is much to say concerning these interesting and extensive ruins, which testify, among many others, to the great and active life of the ancient cities of Assyria, at one time the scourge of the then-known world. The walls and their gates, the numerous other temples, especially

those of Aššur, Nebo and Ereš-ki-gal, the Queen of Hades; the palaces; the platforms; and the "hunting-box" of Sennacherib, which lay outside the walls to the northwest, all present points of interest. Descriptions of these, however, will be best undertaken when satisfactory monographs dealing with them are published, like that of Andrae upon the Temple of Anu and Adad, which has furnished material for this portion of the present paper.

Though the objects of art do not by any means equal in number to those from Nineveh, Calah and Khorsabad, there are still a few which are worthy of notice. One is a 16-sided column of basalt with a strange-looking capital, supposed to be of the time of Tiglath-pileser I. Another good specimen of Assyrian art consists of fragments of bronze on which chased figures in relief may be seen, reminding one of those magnificent brazen gates which Mr. Rassam was so fortunate as to discover at Balawat. This shows figures in procession, seemingly going to meet the Assyrian king, and introducing a smaller figure, apparently a child. There are several scenes on the Balawat gates which can be compared with this, and in the light of Shalmaneser's historical inscriptions, it is seen that the little personage is a princess who is represented, and that she is being surrendered by a conquered prince or chief to the Assyrian king to become one of his wives. The proportions seem not to be so well kept as in the case of the Balawat Gates, but the work in general is good.

NINEVEH

Aššur is regarded as having been the first capital of Assyria, and Nineveh the second; but Dr. Rogers lays claim to the honor of chief city of the kingdom for two others in addition—Calah and Khorsabad the order being Aššur, Calah, Nineveh, Khorsabad (built by Sargon on the site of Magan-ubba), and then Nineveh again. If so, this is a case of kings proposing and God disposing, for notwithstanding all that Sargon did for Dūr-Sarru-ukīn, now Khorsabad, its importance declined after his death, and Sennacherib, his son, showered his favors on Nineveh, which remained the capital of the land until the downfall of the Assyrian monarchy in 606 B.C.

And it is apparently in consequence of what Sennacherib did for the city that its glory revived. Two German scholars, Messrs. Meissner and Rost, have edited and translated very successfully the inscriptions in which that king records his work there, so that we have had for a considerable time rather full details of his architectural, horticultural and defensive achievements.

Lately, however, fresh attention has been attracted to them, for the British Museum has been fortunate enough to acquire another text—a prism similar to the monument known as the Taylor Cylinder, inscribed for the same monarch. This text has, on its 8 faces, no less than 740 lines of writing dealing with his campaigns and his architectural works. There is the usual honorific introduction, and this is followed by his first campaign, which was against Merodach-bal-adan; his second, directed against the Kassites and the Yašubi-galleans; his third, which passed in the land of Hatti, the territory of the Hittites, and was undertaken to chastise Hezekiah and punish the Ekronites; his fourth, which was against the small Chaldean

kingdom of Bit-Yakin; and his fifth, directed against certain states occupying the mountain-fastnesses of Mesopotamia. After these well-known narratives, however, we get details of two little-known military expeditions, in which Sennacherib did not personally take part, but which were led by his generals. The first of the two was against Kirua, ruler of the land of Que (Cilicia), whom he calls "city-chief" of Illubru, and describes as one of his officials. This man not being, as his name implies, an Assyrian, naturally thought to make himself independent of Assyrian rule, and to this end got the city of Hilakku (Cilicia) to revolt, and the inhabitants of the cities Ingirâ and Tarsus to rally to his side. These allies occupied and blocked the Cilician pass, hoping to be able to arrest the Assyrian troops in their advance. In this, however, they were unsuccessful, the forces sent against them being armed with all the thoroughness for which the Assyrians were renowned, and even more thoroughly than on former occasions. The Cilicians were first defeated "among the difficult mountains," and the cities of Ingirâ and Tarsus were captured and spoiled. Next came the siege of Illubru, carried on with the help of all kinds of warlike engines, and its fall followed in due course. Kirua, the governor, was captured, and much spoil taken. Having been brought to Nineveh, he met the fate which awaited him, that of flaying—whether alive or dead the record does not say. At the re-occupation of Illubru, which followed, Aššur's emblem was set up, and, facing it, the memorial slab which had been prepared for the purpose.

According to Polyhistor, Sennacherib proceeded against Cilicia in person, a statement which, if he be referring to the same campaign, must be regarded as incorrect. This historian also says that he fought with them a pitched battle, in which, though he suffered great loss, he was successful in defeating them, and erected on the spot a monument of his victory, consisting of a statue of himself, and a record of prowess "in Chaldean characters." Sennacherib does not mention any statue, but there may well have been a bas-relief above the inscription to which he refers. Confirmation of Polyhistor's statement that Sennacherib rebuilt the city of Tarsus after the likeness of Babylon, and changed its name to Tharsis, may possibly be confirmed by records of a later date—if such ever come to light. Though it is not much, this new chapter in the history of the Apostle Paul's native city is interesting. It had already been taken by the Assyrian king Shalmaneser II, about 850 B.C., when Katî, the then ruler, was deposed and his brother Kirri placed on the throne in his stead.

The other campaign referred to was against Tilgarimmu, a city on the borders of Tubal, which Assyriologists have identified with the biblical Togarmah—a comparison, however, which is not altogether satisfactory; though it may, by chance, turn out to be correct. This place was ruled by a king named Hidî, who had "consolidated" (such seems to be the meaning of the verbal form *irkusu*) "his kingdom," apparently meaning that he wished to be considered as independent of Assyria. Again the superior armament, and, it may be supposed, the organization of the Assyrians, prevailed; and after the usual siege, the city was taken and destroyed, and the gods of the people carried into captivity. At the end Sennacherib men-

tions the amount of military supplies which he captured and distributed among his forces. This was apparently not an important expedition, but it added to the glory of his reign, and is on that account recorded.

But the longest section of the text is that detailing the work which Sennacherib did at Nineveh, his capital, to which he has devoted no less than 345 lines of writing. He describes the city as the place beloved by the goddess Ištar, wherein exist the shrines of all the gods and goddesses—and in this statement we may see why he thought more of Nineveh than of Dûr-Sarru-ukin, his father's great foundation—the new city and royal residence did not appeal to him because it was a place of but little religious and historical interest. This view of his favor towards Nineveh is rather confirmed by the words which follow, wherein he goes on to say, that Nineveh is the eternal groundwork, the everlasting foundation, whose design had been fashioned and whose structure shone forth from of old with the writing of the (starry) heavens—practically a claim that it had a divine origin. It was a place craftily wrought, wherein was the seat of the oracle, and all kinds of art-works, every kind of shrine, treasure and thing of delight (?). It was there that the kings his fathers had ruled the land of Assyria before him, and directed the followers of the god Enlil, in which last we may, perhaps, understand the Babylonians as being meant. None of these kings, however, had beautified the city as he had done.

For the work which he had in view, therefore, he brought the people of Chaldea, the Arameans, the Mannites or Armenians, Que and Hilakku (both mentioned as countries, though in the historical part the latter appears as a city), the land of Pilišti or Philistia, and the land of Tyre. These nationalities, which had not submitted to his yoke, he placed in servitude, and they made bricks for the extension and decoration of the city.

The work which first appealed to him was the building of a palace for himself, and to this end he pulled down the former palace, the terrace and foundation of which had been destroyed by the Tebiltu, a violent stream, which since remote days had sought to reach the structure. In order to safeguard it in future, he turned aside the course of the river, and reclaimed, from another stream, the Khosr, a piece of land 340 cubits in length by 298 in breadth. The palace itself was enlarged, when rebuilt to a length of 700 great *suklum* and a width of 440, and he caused palaces (that is, separate sections or divisions of the whole structure) to be built, and adorned with gold, silver and all kinds of valuable woods. To this palace he added a gateway made after the likeness of that of a Hittite palace, and from the excavations which have been made on Hittite sites, it seems probable that this was a special arrangement of winged lions and bulls, such as the Assyrians had themselves been accustomed to employ for decorative purposes. I quote here Sennacherib's words:

“ . . . a house of double doors (*i.e.*, porch)
in the likeness of a palace of Hattu,
I caused to be made opposite its gates.”

It therefore seems clear that it is the arrangement which is referred to, and not the ornamentation. The lines which follow are characteristic of the east, the land of sweet odors and precious wood:

"Beams of cedar and cypress,
 whose scent is sweet, the products of Amanus
 and Sirara, the sacred² mountains,
 I caused to be set up over them."

In the shrines within the royal chambers Sennacherib opened *âpti birri*, which are regarded as meaning "light-holes," or windows, and in their gates (the gates of the shrines apparently) he set up female winged colossi of white stone and ivory (or perhaps stone of the color of ivory), which bore *illuru* (?columns) and whose claws were curved. "I set them up in their gates, and caused them to pass as a wonderment," says the King. If one might make a suggestion with regard to these interesting objects, it is that they were small and more of the nature of statuettes than of statues, and were in fact possibly the same as that beautiful winged lioness found by the late G. Smith at Nineveh in 1873-74. He describes it as a winged cow or bull (it is restored in accordance with this description) in fine yellow stone, with a human head surmounted by a cylindrical cap adorned with horns and rosette ornaments, wings rising from the shoulders, and a necklace round the neck. On the top of the wings, which stretch backwards, stands the base of a column in the usual Assyrian style. He describes it as being 3 in. high without the feet (which are wanting), 3 in. long and having a breadth of $1\frac{1}{2}$ in. As the face is unbearded it is almost certainly intended for a female, and the absence of any traces of an udder makes it more probable that it is intended for a winged lioness-sphinx rather than a woman-headed cow.

Architectural details concerning the newly-erected palace follow. The recesses of the chambers were lighted "like the day," and the interiors were surrounded with decorative ornaments of silver and copper and with burnt brick and valuable stones, one of them being lapis-lazuli. Some of the great trees used in the construction of the palace had been brought, the king says, from secret places among the mountains of Sirara, their positions having been revealed to him by Aššur and Ištar, lovers of his priesthood. The stone (marble, or perhaps alabaster) used was regarded in the times of his fathers as a fit decoration for the sheath of a sword (implying that it was something rare), and was brought from the land or mountain of Ammanana, and a stone called *tur-mina-banda*, identified by Mr. L. W. King with breccia, which was used for the great receptacles of the palace, came from the city Kabridargilâ on the boundary of Til-Barsip (Birejik). The white limestone used for the winged bulls and female colossi, and other similar statues of alabaster came from the district of the city Balatu, near Nineveh.

These bulls and lions were made in a single piece of stone, and it is noteworthy that the transportation of similar objects, probably for the palace in question, is represented more than once on the slabs from Sennacherib's palace which were discovered by Layard and are now in the British Museum. It does not require a very lengthy inspection of these gems of Assyrian art to realize that they are exceedingly instructive illustrations of the way in which the great Assyrian palaces were built. We see there

²Or "the Snow-capped."

the palace-platform being constructed, and the finished and unfinished human-headed bulls being dragged to the positions in which they were to be set up. The king speaks of the perfection of the form of the female colossi of marble:

"Like glorious day their bodies were bright."

and we can easily imagine the imposing effect which they had when they were new and fresh from the sculptor's hands, on the day when the palace was completed.

And here, in the course of his description, Sennacherib touches on another subject, namely, the casting of bronze. When, in early days, he says, the kings his fathers wished to make an image of themselves in bronze to set up in the palaces (or temples) they made all the artizans groan in their construction:

"Without instruction, not understanding the matter,
for the work of their desire,
they poured out oil, the fleece of a sheep
they sheared within their hands."

This, as Mr. King points out, probably refers to some ceremony in which oil and a fleece were used, in order to bring good luck upon the work. Sennacherib, however, through the clever understanding which the divine prince Nin-igi-azaga (the god Ea, patron of handicrafts) had conferred upon him, combined with his own research and inquiry into the matter, was able to make "great columns of bronze," and colossal lions "open of knee"—probably meaning with legs separated from each other, and not joined together with a core of metal.

"By the counsel of my understanding,
and the inquiry of my mind,
I formed the bronze-work, and
made its execution artistic.
Of great beams and framework,
the forms of 12 shining (?) lions,
with 12 bull-colossi
sublime, which were perfect as to form,
(and) 22 colossal heifers, upon whom
was lusty beauty, who were mantled with strength,
and vigor abounded,
according to the command of the god
I made moulds of clay, and
poured copper (bronze) therein—
as in the casting of half-shekel pieces
I completed their formation."

What was the improvement which Sennacherib effected? The want of a precise translation renders this doubtful, but we may, perhaps, guess that he had come to the conclusion that much labor, and also a considerable amount of metal, would be saved by casting these objects as a shell round

a core of clay which, being constructed with a wooden framework, could afterwards be removed, and the same employed over and over again. In any case, the process here detailed is most interesting, and when more is known of the Assyrian technical terms, may even add something to our knowledge of the history of bronze-casting.

Two of these brass colossi, when finally produced, were overlaid with what is suggested to have been gilding, and were placed with others of limestone and male and female colossi of alabaster, in the gates of the palaces. Numerous other details concerning the colossal bulls and lions which the king caused to be made follow, and he states that he made columns of bronze, and also of all the different kinds of wood which the Assyrians regarded as precious, for which the colossi seem to have formed supports, and the whole was erected as colonnades (?) in "his lordly dwelling." After this come references, apparently, to the bas-reliefs which the king caused to be carved, the slabs being described as having been produced wonderfully, and if this be the true rendering, the specimens in the British Museum confirm Sennacherib's words concerning them—they are wonderful.

Next comes Sennacherib's account of the irrigation works which he constructed. In order to have water daily in abundance, he caused swinging beams and brazen buckets to be fashioned, and having set up the necessary framework over the water-reservoirs and attached them thereto they were used for the watering of the fields and plantations. Here we have a description of that well-known eastern apparatus, the *shadouf*, which Sennacherib would seem to have introduced into Assyria—it is said from Egypt.

" . . . Those palaces I caused to be produced beautifully—
as for the vicinity of the palace, for the wonderment of multitudes of
men
I raised its head—'The Palace which has no rival'
I called its name."

And then comes the description of the surroundings of the palace—the great park or plantation "like Mount Amanus" which he laid out, wherein were all herbs and fruit-trees, trees produced on the mountains and in the land of Chaldea (a plain low-lying and flat), and trees bearing wool. This, as my former colleague of the British Museum points out, must be a reference to the growing of cotton, as is shown by the statement, that it was used for the fabricating of clothing.

At this point he quits the references to his palaces, and speaks of his work on the city of Nineveh. From former days, he says, the area of its circuit had been 9300 cubits, and the princes going before him had not built an inner and an outer wall. Here we have two rather surprising statements. For this estimate of its area is too small to accord with what we have learned from ancient writers, and the absence of defensive walls is not what we should have expected from the Assyrians. If true, however, it would show how remarkably confident they were that the city would not be taken by an enemy—it must have been indeed the city of a nation which trusted in its own power.

This state of things, however, he immediately proceeded to rectify, for he states that he increased the size of the city by 12,515 cubits, and from this portion of the record we gather that the *suklum* and the *âmmat* or cubit were the same. The great wall, of which he records the laying of the foundation, he called "The Wall whose glory overthroweth the enemy." He made its brickwork 40 (? cubits) thick, which would probably not greatly exceed the estimate of the late George Smith, who reckoned it at about 50 ft., but added that excavation would probably decide that point—and we may add, that it would also, perhaps, decide the measure of the *suklum* or *âmmat*. The height of the walls he raised to 180 *tipki*, which, according to Diodorus, should amount to about 100 ft. These were pierced by 15 gates:

"To the 4 winds 15 city-gates,
before and behind, on both sides,
for entering and going forth,
I caused to be opened in it."

Then follow their names, with which, though they are sufficiently interesting, I will not tire you. As specimens of their nature, however, it may be mentioned that the gate of the god Aššur of the city of Aššur was called "May Aššur's viceroy be strong;" whilst "The Overwhelmer of the whole of the enemy," was the name of the gate of Sennacherib of the land of Halzi—an indication, perhaps, of Sennacherib's birthplace. The gate of the Mesopotamian city of Halah was called "The Bringer of the produce of the wooded Heights." The gate of Sin, whose name forms the first element of Sennacherib's own name, was called "Nannar (= Sin) the protector of the crown of my dominion," the moon god being "lord of the crown" in Assyro-Babylonian mythology. What would correspond with the "water gate" was called "Ea, the director of my water-springs;" and the Quay-gate was named "The Bringer-in of the tribute of the peoples." Interesting, also, is the name of the gate *Pakidat kalama*, "The guardian of everything," which was the gate of the tribute-palace or armory—possibly a kind of museum wherein were placed all that the Assyrian king regarded as curious or precious in the way of tribute, gifts, and trophies. The identification of the 15 Ninevite gates will add much to the interest attaching to the site of that ancient city.

Following on this, Sennacherib described what he did in the way of constructing the outer wall named *Bad-nig-erim-hulhula* in the old Sumerian language, which he interprets as meaning "that which terrifies the enemy." This wall was constructed with foundations of enormous depth—as far down, in fact, as "the waters of the underground courses," at which point blocks of stone were placed as a foundation, and it was then carried up to the height fixed upon for the coping with further massive blocks. The object of the wall's great depth was to frustrate attempts at undermining in case the city should be besieged—a vain precaution, if the accounts of the taking of Nineveh be true, for it is said that some part of the wall was undermined by one of the rivers flowing near, and fell down; and that it was through the breach thus formed that the allied forces of the Medes,

Babylonians and others, entered. "I made its work skillfully," the king then says, as if satisfied with what he had done.

He then returns to the city itself, the area of which he enlarged, broadening its open spaces, and making it bright "like the day"—an improvement which Oriental cities often need. Above and below the city he then constructed plantations, and placed therein the vegetation of the mountains and the countries around—all the sweet-smelling herbs of the land of Heth (Palestine and Phœnicia), and certain plants called *murri*, among which, more than in their native places, fruitfulness increased. These and other plants he set therein, and planted them for his subjects—probably the higher, rather than the lower, classes of his people. A description of what he did to improve the water-supply for these plantations, and wherewith, at the same time, apparently, he watered all the people's orchards, and a thousand cornfields above and below the city, forms a fit conclusion to this portion of the narrative.

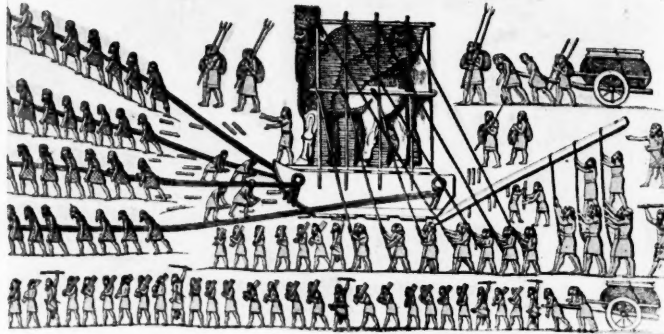
To retard the current of the river Khosr the king constructed a swamp, in which its waters lost themselves. Reeds and rushes were planted within it, and wild fowl, wild swine and apparently deer placed therein. All the trees which he planted thrived exceedingly, in accordance with the word of the god. The reed-plantations prospered, the birds of heaven and the wild fowl of distant places built their nests and the wild swine and forest-creatures spread abroad their young. The trees useful for building he used in the construction of his palaces—the trees bearing wool they stripped, and beat out for garments.

To celebrate the completion of the work a great festival was held, worthy of such a king, who, whatever may have been his conduct with regard to other nations, seems to have attended well to the needs of his own people. Assembling the gods and goddesses of Assyria in his palace, numerous victims were sacrificed, and gifts were offered. There was oil from the trees called *sirdû* (which may therefore have been the olive), and there was produce from the plantations more than in the lands whence the trees therein came. On that occasion, too, when the palace was dedicated, he saturated the heads of the people of his land with oil, probably from those trees, and filled their bodies with wine and mead. The inscription ends with the usual exhortation to those "among the kings his sons, whom Aššur should call for the shepherding of land and people," to repair the wall when it should fall into ruin; and having found the inscription inscribed with his name, to anoint it with oil, sacrifice a victim, and restore it to its place. "Aššur and Ištar will hear his prayers."

After this pious wish comes the date:

"Month Ab, eponymy of Ilu-itti-ia, governor of Damascus."

In all probability many will say that we have here a view of the great and (it must be admitted) cruel conqueror in an entirely new light, namely, as the benefactor of his country. And if what he states be true, the question naturally arises: What modern ruler could say that he had done as much for his capital as Sennacherib claims to have done for Nineveh? And who shall say that he claimed unwarrantedly to be the benefactor of



TRANSPORTING A WINGED BULL. DRAWING BY HAUPT

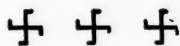
the great city? The sculptures from his palace exist to confirm his record. We see the winged bulls, of colossal size, lying down in the sledges on which they were transferred from the quarries to the site of the palace, sometimes placed uprightly, and carefully propped up to prevent damage by breakage. The sledges, which the Assyrians called ships or boats, are being dragged and forced forward by means of enormous levers upon rollers by armies of workmen, the captives taken in his warlike expeditions—Armenians, Phœnicians, Tyrians, Cilicians, Chaldeans and others, driven to strenuous effort by the whips of unsparing taskmasters and the loud voices of the directors of the work. In the background, behind the slaves toiling at the great cables and the levers, we see the soldiers of the guard, and behind these again extensive wooded hills. In other sculptured pictures, however, it must be the pleasure-grounds of the palace which are represented, with a row of trees, alternately tall and short, in the distance. This scene is placed on the banks of a river, whereon we see boats, and men astride on inflated skins. At another point we see the great king himself in his hand-chariot, superintending the work. Here the background consists of reeds and rushes, and we see the deer to which he apparently refers, and also a wild sow with a litter of young. One of Layard's pictures, which is described as a representation of an "Obelisk or stone in a boat," implies that these boat-like sledges were made to float or to be moved on land by means of the rollers referred to above. In this case the "boat" is in the water, and being dragged by long rows of laborers, many of whom are naked, and all seem to be toiling in the water. The ropes attached to the boat-like sledges or rafts are excessively long, and even in the incomplete state of the slabs as Layard saw them, 36 men to each may be counted. The great pioneer of Assyrian exploration gives, in his *Monuments of Nineveh*, second series, an excellent drawing of a winged bull and human figure from one of the gates of the old wall of Nineveh, showing, if any proof were needed, how very excellent the work of Sennacherib's sculptors was. It is said that some of the remains seen by Layard on the spot have been since his time

destroyed, and if this be the case, it is a deplorable loss. Fortunately we have Layard's drawings, and know what they were like.

George Smith, in his *Assyrian Discoveries*, gives us a good account of Nineveh. He states that the north wall measures about $1\frac{1}{2}$ miles, the south rather more than half a mile, the east wall about $3\frac{1}{4}$ miles and the west over $2\frac{1}{2}$ miles. No extension of the city outside the walls seems to have been recognized by the Assyrians, except that called *Rêbit Ninua*, probably meaning "the extension of Nineveh," which seems to have been on the north, stretching towards Khorsabad. It has been identified with great probability, as the biblical Rehoboth-Ir. In the Book of Jonah, however, Nineveh is stated to have been an exceeding great city of 3 days' journey, and that being the case, the explanation that Calah on the south and Khorsabad on the north were included seems very probable. The distance between those two extreme points is about 30 miles, which at 10 miles a day, would take the time required. Ovid, in his story of Pyramus and Thisbe, states that the tragedy which he relates took place near the pyramid at the entrance of Nineveh. This was the traditional tomb of Ninus, and may well have been the great temple-tower excavated by Layard at Calah, in which he found a long passage, the original object of which was difficult to determine, and it cannot be said therefore whether it had ever been used as a tomb or not. It is to be noted, moreover, that in Genesis x, 11, 12, Resen, between Nineveh and Calah, is described as being "the great city." As it seems never to be spoken of in the inscriptions (the only Resen mentioned having lain seemingly on the north of Nineveh proper), it could not have been a city of any dimensions, and this parenthetical description may therefore refer to all the sites mentioned. As Jonah's missionary visit to Nineveh took place during the reign of Jeroboam II, 783-743 B.C., Khorsabad must be excluded; but perhaps the extent of the united cities, "Nineveh, and Rehoboth-Ir, and Calah" (with Resen), was sufficiently great for a 3 days' preaching journey without taking in the northern foundation of Sargon.

THEOPHILUS G. PINCHES.

London, England.



WORK OF THE ANTHROPOLOGICAL SECTION IN THE NEW YORK STATE MUSEUM

WITH the erection of a new State Education Building in Albany in which the State Museum of New York has its new quarters, it became necessary for the Anthropological Department to devote its energies almost entirely to preparing its exhibits for the new quarters. This has consumed a large portion of the activities of the members of this Department.

During the period, December 1 to April 1, a large portion of the time was given to corresponding with representative men throughout the State, with the idea of getting every locality in which there had been found any Indian remains enumerated and described. Several hundred new sites were recorded in connection with this survey, a "census" of the numerous collections within the State was taken, so that the State Museum now has the card index of nearly all the collections, large and small, within its field. The work incident to the preparation of the 6 large ethnological groups is being continued.

Ten new life casts of Indians of the various Iroquois tribes have been added to the number already in the possession of the Museum, which now totals more than 40. Large paintings representing typical scenery connected with Iroquois history and occupation have been prepared; the last one being a painting 50 ft. in length and 20 ft. in height, painted on the spot and depicting the site of Champlain's Battle with the Oneidas in 1615. This painting will form the background of the Oneida Industrial Group, which represents a group of Indians posed in front of a bark lodge within the stockade of the old Oneida village. The figures which are life casts represent certain Iroquois activities as follows: pottery making, basket making, weaving, stone chipping, wood carving, and the making of clothing.

Several archaeological collections have been added to the museum accessions, but during the year, on account of other activities, there has been no field work in this line.

The studies of the wampum codes of the Iroquois and further research in the traditions and ceremonies has been continued with success. This branch of the work has suffered a great loss through the death of Mr. Albert Cusick of Onondaga, for many years the Indian collaborator and authority of Dr. Beauchamp, and earlier, of Horatio Hale; and of Chief John Gibson of the Grand River Reservation in Ontario, who supplied much information for the Bureau of Ethnology, the Ontario Provincial Museum and the State Museum.

During the year the Archæologist submitted to the Education Department a report of his investigations into a "new religion" of the Iroquois and within the next few months, the document will appear in published form under the title, *The Code of Handsome Lake*.

ARTHUR C. PARKER.

BOOK REVIEWS

THE DECIDING VOICE OF THE MONUMENTS IN BIBLICAL CRITICISM¹

THIS work of one of the consulting editors of the *RECORDS OF THE PAST*, though prepared for the specific purpose of showing the agreement between Biblical records and the discoveries made by explorers in Bible lands is of equal interest to those who are engaged in purely archaeological and historical investigations. One reads the book with that assurance which can come only from the fact that the writer has first hand knowledge of the subject of which he is treating. For many years Dr. Kyle has been engaged with field workers, especially with Naville and Petrie in their exploration and interpretation of Egyptian monuments. His publications in European archaeological journals have given him a high position among archaeologists. In addition to his work in Egypt he has personally traversed the Sinaitic Peninsula and almost every corner of Palestine. It is of the greatest importance, therefore, to have such an authority give us a complete summary of well accredited archaeological discoveries which bear upon the purported historical statements which have come down to us through the sacred literature of the Jews.

The volume consists of three parts, the first treating of the Function of Archaeology and Criticism, the second of the History of the Testing of Critical Theories by Archaeological Facts, and the third of the Progress of Archaeological Research in Testing the Biblical Narrative and Settling Questions Raised by Criticism. We must content ourselves with a brief statement of the most important facts that are shown by our author to have been established by archaeology concerning the progress of events during the few millenniums which precede the Christian era.

Archæology teaches us that the rise of civilization was in Babylonia, but that the Sumerians or Accadians with whom this civilization originated were not a Semitic people and did not have either the language or the physiognomy of Semites. Civilization in Babylonia first emerged under the leadership of Nimrod, "the mighty hunter," of Hamitic descent.

The original inhabitants of Canaan were not Semitic people but the civilization in Canaan in Bible times was an imported Semitic civilization.

The Babylonian domination in Palestine, about 1800 B.C., as indicated by the fourteenth chapter of Genesis, is amply supported by the circumstantial evidence found on the Babylonian monuments. The beginning of this domination in Palestine goes as far back as the time of Sargon I, whose generally accepted date was about 3800 B.C. The Code of Hammurabi reveals a high state of political and social organization at about 1800 B.C., showing that Palestine "so far from then being a semi-barbarous land was

¹ *The Deciding Voice of the Monuments in Biblical Criticism.* By Melvin Grove Kyle, D.D., LL.D., Lecturer on Biblical Archaeology in Xenia Theological Seminary, Archaeological Editor of the *Sunday School Times*, etc. Pp. 325, 8vo, cloth. \$1.50, net; postage, 15 cents.

under one of the simplest and most orderly and symmetrical codes of civil and criminal laws ever enforced in any land" (p. 206). Numerous practices allowed by the common law of the Jews at that time betray the existence among them of regard for the precepts embodied in the laws of Hammurabi. Among these may be mentioned the practice of adoption, of betrothal, and the bestowment of marriage dower, and the power of life and death bestowed upon the father, and the methods of legal contract.

We find that a postal system which reached as far as Palestine had been established in Babylonia in the time of Naram-Sim about 3700 B.C.; that pottery of beautiful shape and exquisite workmanship was then manufactured in abundance. In Canaan in the time of the Patriarchs there was "such a collection of oriental articles of luxurious refinement as could not be duplicated and scarcely approached in richness by robbing all the museums of today" (p. 211). Among the booty gathered by Thothmes III in Canaan during the Israelite sojourn in Egypt are "inlaid and gilded chairs and tables and a golden plow and scepter, richly embroidered clothes, a chariot chased with silver, jewelled tent-poles, gold-plated chariots, iron armour inlaid with gold, and a helmet of gold inlaid with lapis-lazuli" (p. 211).

From the Tell Amarna tablets we learn that the cuneiform language of Babylonia was extensively employed in correspondence in Palestine and Egypt, some time before the conquest of Palestine by the Israelites. Evidence is accumulating that for 5 centuries before the Exodus Lower Egypt was ruled by Bedouin princes (for such were the Hyksos) whose capital was at Zoan, thus accounting for the ready reception which was accorded to Abraham, Jacob, and Joseph by the Pharaohs of Egypt. Conclusive evidence of the prevalence of a Semitic language among the inhabitants of the region about Zoan was long ago discovered by Brugsch and within the last year Petrie and Kyle found evidence of Hyksos occupation of Lower Egypt in the ruins of Heliopolis.

"In the tomb of one Baba at el-Kab, now unfortunately much mutilated, is an inscription of the time of Se-Kenen-Ra-Taa III, a vassal king of Upper Egypt under the Hyksos rulers. Exact dates are here impossible, but the time of this king and of this inscription is known to be about the time of Apophis, the traditional Pharaoh of Joseph according to Syncellus. Thus far none of the identifications between the story of Baba and the history of Joseph are absolutely certain, but when we read the inscription as it appeared in Brugsch's day the parallelism of the two accounts of certain events in the empire becomes most suggestive. Baba says 'I collected corn, as a friend of the harvest god. I was watchful at the time of the sowing. And when a famine arose, lasting many years, I distributed corn to the city each year of famine'" (pp. 225, 226).

"The coming of Asiatics into Egypt before the time of Jacob is pictured in the tomb of Khnem-Hotep of the XIIth dynasty at Beni Hasan. The similarity of this scene to the entrance of Jacob and his sons with their retinue into Egypt is so strikingly exact that for a long time in the earlier history of Egyptology this was believed to picture that patriarchal event" (pp. 226, 227).

"This whole history of the descent into Egypt is most essentially reasonable and credible. Undoubted identifications confirm the topographic and ethnic notices in the patriarchal story; Egyptian descriptions substantiate the manners and customs depicted in the Bible; Egyptian scarabs confirm even the name 'Jacob' for that period in Egypt; Egyptian history furnishes a similar famine story; and attests the 'abomination' in which 'shepherds' were held and the Egyptian funeral customs most exactly illustrate the funeral and mourning for Jacob. This part of the patriarchal story fits, in every way, exactly into the age and the lands to which the Bible attributes it" (p. 228).

The Tabernacle in the wilderness with its furnishings and symbolism reflects Egyptian ideas and coloring. "The main features of its architecture are the main and unvarying features of Egyptian architecture in the humble home of the peasant, in the palace of the prince, in the tomb, the home of the dead, and in the temple, the home of the Gods" (p. 239).

Among the interesting confirmations of the early date of the Pentateuch is the "presence and peculiar use of certain Egyptian words scattered all through the various parts of the Pentateuch. These words are of such unusual meaning and of such temporary use in Egypt, belong so peculiarly to the place and the times and are used with such absolute accuracy throughout the Pentateuch, that it is incredible that scribes of a late period in Israel's history could have attained to such linguistic nicety. The passages in which these words occur must have come from the Mosaic age the only age when some of them were employed in Egypt" (pp. 249, 250).

"When the archaeological data of the Mosaic age are laid all along the course of the Pentateuchal narrative, it is found to be so uniformly harmonious with that narrative, with the customs, the institutions, the topography, the itineraries, and the history, as far as these are known, all the way from the shadows of Hebrew slavery in Egypt to the fifth year of Meremphah and the turning back from Kadesh Barnea, as to make one marvel that different authors in different centuries should have been so uniformly successful in the representations of historical fiction" (p. 251).

But space fails to enumerate the archaeological discoveries bearing upon Biblical history, relating to the nations with which Israel came in contact. Egypt, Philistia, Moab, Syria, Assyria, and Babylonia are vividly brought to light by archaeological discoveries in a way which parallels the Biblical history in a remarkable manner. The volume while scientific in character is popular in style, and appeals to a wide class of readers.

GEORGE FREDERICK WRIGHT.



EL BUWAIB—EASTERN ENTRANCE TO THE OASIS OF FEIRAN

From From Nile to Nebo

FROM THE NILE TO NEBO¹

AFTER a study of its problems for a period of a quarter of a century, the author presents a timely treatise upon the subject of the Exodus. It is a volume which will be carefully read by all students of the modern literature on the Pentateuch.

A thorough knowledge of the Arabic language, and extended journeys through the country, together with an acquaintance with the people and their habits and customs, as well as a careful study of the extensive literature which has been produced upon this region, have peculiarly fitted Dr. Hoskins to make this study of the Bible in the land where it had its origin. No one has had such splendid opportunities, for too many others who have written upon the subject have been permitted to see only portions of the land, and after laborious preparation at home, their time on the ground has been much too short.

In this book, the narrative and the discussion of the theories is skilfully interwoven, so skillfully in fact that even the ordinary lay reader will not skip over the chapters upon chronology, the numbers of the people, or the study of the documents of the Pentateuch.

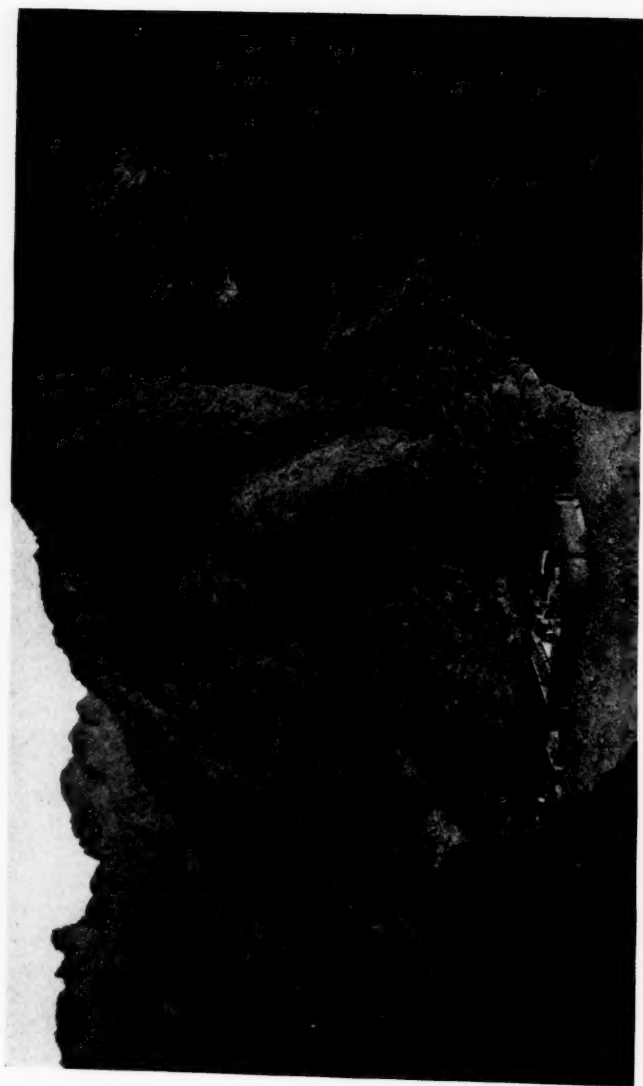
While the volume is a description of a journey, it is something more. It contains at their proper place in the narrative, a serious discussion of deep questions of great importance to Bible students, and it does not lose any of its serious purpose through its lucid style, which is not the means of hiding its content from the comparatively untrained. It is a book which will strengthen the faith of its reader, and will not undermine his confidence in the Bible as a record of facts. Its tone of progressive conservatism is refreshing today when destructive criticism seems to occupy the center of the stage. Its sane and wholesome positions do not detract from its value as a critical work, and it is destined to be distinctly helpful to those who may have been somewhat disturbed by some modern tendencies.

It is a book which should be in the hands of every Sunday School teacher for it will give them a comprehensive grasp of the history of the Peninsula, and at the same time will explain its connection with the events which took place within its bounds, at a time of greatest importance to the human race.

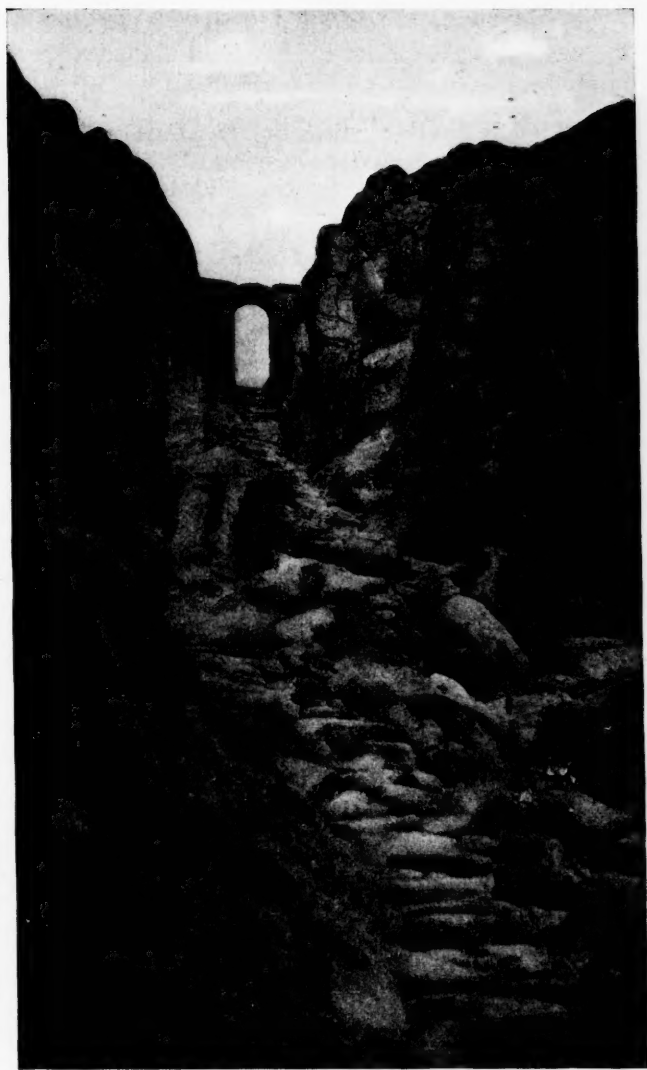
The journey upon which the narrative is based extended from Egypt to Syria a distance 1900 miles, through the Sinaitic Peninsula, Mount Seir, Edom, Moab and Amman and ended at Jericho. The illustrations, many of which are quite striking, are mainly the work of the author, and are very helpful in understanding the arguments presented.

WILLIAM LIBBEY.

¹*From Nile to Nebo: A Discussion of the Problem and the Route of the Exodus.* By Franklin E. Hoskins, D. D. Pp. 378, 85 illustrations. Map. \$3.00 net. Philadelphia: Sunday School Times Company. 1912.



A VIEW OF THE MONASTERY FROM A POINT ON THE "STAIRWAY"
From From Nile to Nebo



JEBEL MUSA, PILGRIM GATE AND A BIT OF THE STAIRWAY
From *From Nile to Nebo*

EDITORIAL NOTES

SOCIÉTÉ DES AMÉRICANISTES DE PARIS.—Prof. George Grant MacCurdy of Yale University has been elected a Corresponding Member of the Société des Américanistes de Paris.

CORRECTION.—In the article on *The Cayuga Chief*, Dr. Peter Wilson in the last issue of RECORDS OF THE PAST (vol. xi, p. 263) the parenthesis (or according to a letter from Rev. Dr. Wm. T. Beauchamp, she married Daniel Two-Guns) by error was placed so that it referred to Lucy Wilson. It should have been placed so as to refer to her mother Maria Wilson.

AMERICAN ANTHROPOLOGICAL ASSOCIATION.—At the recent meeting of the American Anthropological Association held in Cleveland, Ohio, the following officers were elected: President, Prof. Roland B. Dixon, Harvard University; Secretary, Prof. George Grant MacCurdy, Yale University; Treasurer, Mr. B. T. B. Hyde, New York; Editor, Mr. F. W. Hodge, Bureau of American Ethnology.

BURIAL URN FROM ESSEX.—“A burial urn was recently found at Mistley, Essex. It belongs to the bronze age and is a very good specimen. The bones in it are pronounced by a doctor to be those of a full-grown man. The probable date of the burial was about 600 B.C. It is hoped that the urn will ultimately be deposited in Colchester Museum; but the matter has not yet been finally settled.”

DR. MACKENZIE TO GO TO EGYPT.—Dr. Duncan Mackenzie finished his work at 'Ain Shems in August last and then went to Athens to write his report. When about to leave, he received a contribution which enabled him to continue the excavation of the cave at the “High Place” of Beth Shemesh, which otherwise could not have been done. When this work is finished, Dr. Mackenzie will go to Egypt where he will undertake excavations in the Soudan.

THREATENED DESTRUCTION OF MOUNDS AT BELLEVILLE, ILL.—We sincerely hope that the citizens of St. Clair County Illinois, will be successful in their efforts to save intact the entire group of mounds southwest of Belleville which are threatened with destruction by a railroad project. Their proposition to have the tract of land converted into a State park is specially fitting. This great center of the Mound Builders activity should be left undisturbed as far as is practical, and not only the citizens of that immediate vicinity but of the whole country should demand that adequate protection be given them.

MAPPING THE MAYA COUNTRY.—Mr. R. H. Millward last spring did some exploring in the district of Peten, in Guatemala. He

studied and photographed ruins and temples and laboriously mapped the extent of the Maya empire. The architecture partakes of a Mongolian type. According to Mr. Millward, the most recently deciphered hieroglyphic texts indicate a culture as old as that of Egypt. One old chronicle relates that when Cortez arrived there were trees more than 1000 years old growing on some of the ruins. More than 300 groups of ruins were encountered by Mr. Millward.

ROCK-INSCRIPTION OF SENNACHERIB.—At the meeting of the Society of Biblical Archaeology on November 13, 1912, Mr. L. W. King of the British Museum spoke on *Some Unpublished Rock-Inscriptions in Turkish Kurdistan*. These were on the Judi Dag, east of the Upper Tigris, where Mr. King came upon them in 1904. The inscriptions are the work of Sennacherib and are far from any great center of population or caravan route. They seem to have been placed purposely as near the top of the mountain as possible, for it was hostile territory. They commemorate a successful campaign between 698 and 695 B.C. These new texts prove that the Mount Nipur of the Assyrian inscriptions is not in Cappadocia but is really Judi Dag. The position of a number of towns is settled also. Sculptures accompanying the inscriptions represent the king in the conventional attitude adopted on the bas-reliefs of the period.

EXCAVATIONS IN BOLIVIA.—The Bolivian Minister of Public Instruction has provided funds for the systematic excavation of Tiahuanacu, in order to save the archaeological material from further depredations such as have been carried on in the past. The Director of the National Museum, Dr. Otto Buchtien has the work under his supervision. A report of the work already done has been issued. At a depth of from 3 to 10 ft. much pottery was found of pre-Inca age, many objects being in good condition. The material is fine, and many of the cups and bowls are artistic in form and the coloring is excellent. A great variety of ideographs and pictographs are represented. A human figure in silver is interesting as showing the nature of the garments worn in that ancient time. Worked stones have been found as well as skulls showing traces of deformation. One skull, belonging apparently to an ancient race, shows the frontal suture and is larger in all dimensions than skulls of the present.

CAVE-PAINTINGS IN WALES.—In October it was announced that Professors Breuil and Sollas had discovered a prehistoric cave-painting in a cave called Bacon's Hole, near the Mumbles, Wales. It consists of 10 horizontal bands of vivid red arranged in a vertical series of about 1 yd. in height. A deposit of stalactite has formed over them, so that none of the paint can be rubbed off. The two professors had been searching the caves of the coast of Gower for undoubted Aurignacian implements, and, having found them, hoped to find paintings. Some have tried to discredit this discovery, but the two men are agreed that the paintings are ancient. Professor Sollas is reported to have made a special visit to verify his former observations of stalactite formation. He found

it there, and with hammer and chisel detached a fragment of the painted surface, thus getting a section through the deposit. The paint is on an old layer of stalactite, and is in turn covered by a later layer. A layer 1 mm. thick is sufficient to conceal the paint. The inner chamber of the cave is now kept locked and the painting thus preserved from relic hunters.

DEATH OF ANDREW LANG.—In the death of Andrew Lang, M.A., D.Litt., F.B.A., on July 20, 1912, the science of anthropology lost an untiring worker. He was not merely an anthropologist, however, but a many-sided, great writer—"a detached, unofficial, unendowed man of letters, a knight-errant of the pen. It is true that in this capacity he dealt with all sorts of subjects, touching no one of them without striking fire from it. But it is also true that, when he wrote about anthropology, he put his whole heart into the business. He was not merely versatile in the sense that he could get up a case in a hurry, as a barrister has to do, so as to score a momentary success. He was rather many-souled. He had an extraordinary gift for identifying himself with this and that interest in turn; so that for the time being he was master of the matter in hand, because so completely master of himself, of his mobilised and concentrated powers. His air of carelessness was a harmless pose. He put the best of himself into whatever he was about, a clear proof being that he experienced that joy in his work which is the supreme reward of sincerity."

His first notable work on anthropology was his article on *Mythology* in the ninth edition of the *Encyclopædia Britannica*. He was then 40 years old. This article won him great fame and was followed in the same year (1884) by his *Custom and Myth* and 3 years later by *Myth, Ritual and Religion*. It is on the side of anthropology which is concerned with folklore that his chief strength lies. His classical scholarship helped him greatly in this field. During the next 10 years no more anthropological work of note came from his pen. Then appeared *The Making of Religion, Magic and Religion, Social Origins* and *The Secret of the Totem*.

"In order to appreciate his work at its full value, his innumerable contributions to periodical literature must likewise be taken into account. Indeed, his unique gift lay in his power of treating anthropology as an everyday topic belonging to general culture. He was clever in constructive theory, brilliant in dialectics; but perhaps his chief title to fame is that he taught the world that the humanities are not alien to the science of man, nay that it is the common root and parent of them all."

ÉCOLE D'ANTHROPOLOGIE DE PARIS.—The École D'Anthropologie de Paris announces the following courses for the year 1912-1913:

Anatomic Anthropology: Anatomic Characters of Fossil Man. Prof. R. Anthony.

Prehistoric Anthropology: Art and Industry of the Magdalenians and the Neolithic Populations. Prof. L. Capitan.

Zoölogic Anthropology: Appearance of Man in Europe: Hypotheses as to Anthropogenic Centers. Prof. P. G. Mahoudeau.

Ethnology: Study of Mendelian Heredity—Facts, Laws, Anthropologic Applications. Prof. G. Hervé.

Physiologic Anthropology: Intelligence in the Human Species, according to Race, Sex, Age, Social Categories, and the Individual. Prof. L. Manouvrier.

Comparative Ethnography: Origin and Evolution of Clothing and Ornament. Prof. A. de Mortillet.

Sociology: The Social Maladies. Prof. G. Papillault.

Anthropologic Geography: Geographic Relations in Prehistoric and Historic Times. Prof. F. Schrader.

Ethnography: The French Colonies, Morocco, Central Africa. Prof. S. Zaborowski.

Linguistics: History of Linguistics, The Higher Languages. Asst. Prof. J. Vinson.

Series of Special Lectures by Dubreuil-Chambardel, Franchet, Kollmann, and Paul-Boncour.

PHILISTINE CITY OF ASKELON.—The Palestine Exploration Fund *Quarterly Statement* for January, 1913, contains an exceedingly interesting article by Dr. Mackenzie on *The Philistine City of Askelon*. After a vivid description of his journey to the site in 1911 and the present status of the remains, he gives in detail the strata exposed by the action of the waves. The sea is destroying the Crusader walls and then those of an earlier date; so that what is exposed at one time will soon be destroyed, revealing something else.

At the time of Dr. Mackenzie's visit the natural section revealed 10 strata—pre-Semitic, Early Canaanite, Canaanite, a burnt layer, Philistine, Late Philistine to Roman, Byzantine, burnt layer of Arabic conquest, Crusader and Late Arabic deposits. The stratum next the rock—provisionally called pre-Semitic—shows no wall at this point, but fragments of roughly levigated pottery is found, which might belong to the early part of the bronze age, before 2000 B.C. The Early Canaanite stratum has a wall and in it was found a fragment of wish-bone handle such as is characteristic of bowls with geometric pattern like those found in the necropolis of Agia Paraskevi near Nikosia in Cyprus. This is considered as belonging to the early part of the second millennium B.C. All of which would indicate that this wall was of Canaanite date.

The next stratum—Canaanite—had in the débris distinctive sherds of the late bronze age of strong Semitic stamp. Here was also a fragment of an alabaster vase of Egyptian fabric of the XVIII dynasty or later. The burnt layer indicates a general catastrophe, possibly at the time of the coming of the Philistines.

There was much pottery found in the stratum of Philistine débris. This pottery is similar to the painted Philistine pottery at Tell es-Safi (Gath) and elsewhere.

The later strata did not seem to be as significant as the Canaanite and Philistine layers. Possibly in those earlier eras there was concentration upon the tell next the sea and about the harbor, while the Roman period was one of expansion landwards. Probably, then, what is intrinsically Canaanite and Philistine will be found in the tell and the harbor.

SKELETON AND DRINKING CUP FROM AVEBURY.—On December 2, 1911, one of the standing stones at Avebury fell. This was one of the 2 remaining stones of the original 3 which are supposed once to have formed a cell at the site of Beckhampton, or western avenue, that issued from the great circle of Avebury. This is generally known as Longstone Cove, or the Longstones, but the two stones are popularly called Adam and Eve. It was Adam which fell in 1911. The Wiltshire Archaeological Society decided to reërect it, believing that it could be preserved better in that way.

It was necessary first to clear the hole in which the stone had stood. Mr. and Mrs. B. H. Cunnington were entrusted with the supervision of the work and on May 24 and 26, 1912, it was undertaken.

The hole was $13\frac{1}{2}$ ft. long from east-south-east to west-north-west, with its greatest width, $6\frac{1}{2}$ ft., at the easterly end, the opposite end being $4\frac{1}{2}$ ft.; the hole was 3 ft. 8 in. deep, 2 ft. 5 in. of the entire depth being in the solid chalk. The stone had been packed with 150 sarsen stones, some of which were estimated to weigh more than 100 lbs. A large piece had split off the stone and was resting against the southern wall of the hole.

Of considerable importance was the discovery of the remains of a human skeleton and the fragments of a "drinking cup" or "beaker" close in front of the hole in which the stone had stood. The burial was very close to the stone when standing and exactly in the center of its northern side. The burial had been laid on the level surface of the chalk. The bones had been disturbed and broken in the ground so that the original position could not be ascertained accurately, but it was evidently crouched with the head to the east. The majority of the bones and pottery fragments were within a space 3 by 2 ft.

As the soil here is only 15 in. deep, the burial must have been shallow. Possibly, however, a mound was banked up against the stone and subsequently destroyed by cultivation. Cultivation is sufficient explanation of the broken and disturbed condition of the skeleton.

"It is now generally recognized that the 'drinking-cup' type of pottery belongs to the transition from the neolithic, or to the earliest bronze age in Britain, and as it seems clear that the burial must have been made at the foot of the stone after its erection, the importance of the discovery with regard to the date of the monument is considerable. It appears to be good evidence that this stone, and therefore presumably the whole of Avebury, must have been standing at least as early as the beginning of the bronze age in England.

"The 'drinking cup' or 'beaker' of which fragments were found with the bones, is a well-decorated and well-made example of the ovoid cup with re-curved rim, and must have stood not less than 8 in. in height. The ware is thin and baked to a bright red both on the inside and outside of the vessel, showing the grey paste in the middle; the paste is fine and sparingly mixed with sand. The cup was decorated from rim to base with a series of horizontal lines, alternating with rows of herring-bone pattern, and bands of the plain polished surface. The horizontal lines, and the lines forming the herring-bone pattern, are notched, as if impressed by a notched or serrated tool, as is so often the case on this type of vessel."

A fragment of the cup as well as a fragment of Samian ware was found in the loose earth which fell into the hole with the fall of the stone. A fragment of another decorated "drinking cup" was found 2 ft. deep among the undisturbed packing stones. Several pieces of what may be Romano-British pottery were found in the soil round the hole.

The skeleton evidently belonged to a medium sized individual of middle age. A fragment of the collar bone is stained apparently by contact with bronze, but no fragment of that metal could be found. The pottery fragments and the bones will be placed in the Museum of the Wiltshire Archaeological Society at Devizes.

VITCOS, THE LAST INCA CAPITAL.—Prof. Hiram Bingham, director of the Yale Peruvian expedition in the *Proceedings of the American Antiquarian Society*, 1912, gives an interesting account of the last days of the Inca rule, quoting largely from early Spanish records. He follows this with a description of his search for the ruins of Vitcos, the last Inca capital. With these descriptions well in mind he set out and was successful in finding ruins which correspond remarkably well with the descriptions. Although he admits that all the possibilities have not been exhausted yet he feels reasonably certain that he has discovered Vitcos, the capital and the Temple of the Sun where early chroniclers say the "Devil appears in visible form and was adored by these idolators."

We quote Professor Bingham's description of Rosaspata which he identifies with the capital and Nusta España which he considers the ruins of the Temple of the Sun:

Leaving the ruin of Uncapampa with my Indian helpers I climbed back on to the ridge, found a path along its west side and came to the ruins of Rosaspata. Passing some ruins very much overgrown and of a primitive character, I found myself on a pleasant open plaza, bounded on its north side by the ruins of a large palace.

The view from the plaza is a particularly extensive one on all sides. To the north and south are snow capped mountains, and to the east and west deep beautiful valleys. The long palace . . . is 245 ft. long and 43 ft. wide. There are 15 doors in front, and 15 doors behind, but none in the ends. There are no windows. It is divided by halls into 3 divisions. The front entrance to each hall is a particularly well made door, containing a reëntrant angle. These 3 principal doors and the other lesser doors are all of white granite, rather carefully squared and finished. The lintels of the doors are solid blocks of white granite from 6 to 8 ft. in length. Most of them have been destroyed but enough remain to give a good idea of its former grandeur. The walls between the doors are not so carefully made and the stones have not been squared. Only a few niches remain, so that it is impossible to say whether there were niches in the entire building. There are also a few cylindrical projecting stones, as at Choquequirau. What niches there are have been carefully made. Altogether it is a suitable building for the residence of a king. A very small portion of wall stands as it did originally. Most of the rear doors have been filled up with stones taken from the ruins in order to make a continuous wall. New walls have also been built to divide the hill-top into pastures. There is considerable grass here and we saw a number of cattle. There is some evidence of a considerable amount of digging having taken place near the walls and of the wanton destruction of many in efforts at treasure hunting. The fine doors were much better than any we saw anywhere except at Macchu Pichu.

Back of the large palace and a few feet above it on the end of the knoll which ends this part of the ridge of Rosaspata is what might fairly be called a palace-compound consisting of 13 or 14 houses arranged so as to form a rectangle with large and small

courts. The outside dimensions of the palace-compound are about 161 ft. by 146 ft., but it is not perfectly square. The buildings themselves vary from 16 by 22 ft. to 30 by 46.8 ft. A couple of terraces separate the long palace from the palace-compound. On the north side of the larger courtyard there is a niche in a wall which may have been a kind of shrine.

The hill falls very rapidly on all sides and it would have been extremely easy for a small force to have defended the hilltop.

We had been told that the most interesting place near here was Ñusta España, and that there we would find a great white rock over a spring of water. We arrived at this place at 4 o'clock and were at once impressed by the truth of what we had heard and convinced that this was indeed the sacred spot, the center of idolatry in the latter part of the Inca rule, according to Father Calancha. The rock was so much overgrown and surrounded with jungle, especially on two sides, that we made arrangements with the Lieutenant-Governor to have a force of Indians come here the next day and clear the rock so that we could take photographs and make measurements of it.

Ñusta España, or as it was called in early Spanish colonial times, Yurak Rumi, is a white granite boulder, 52 ft. in length, 30 ft. in width, and 25 ft. high above the present level of the water and swamp that surround it on the east and south sides.

On the south side of the monolith 4 or 5 small seats have been cut in the rock and several large seats. Viewed from this side the rock looks not unlike a miniature mountain. This was probably its natural shape although nature has been helped to a certain extent. Great care was exercised in cutting out the seats and the edges are very nearly square and almost straight. In several places on the rock square projections have been left in bold relief projecting from 4 to 8 in. The east side of the rock projects over the spring. A stone platform comes down to the water's edge. Near the water steps have been carved. Two seats have been carved out of the rock immediately above the spring. On the north side the rock has evidently been flattened artificially and carved into a rough relief. There are 10 projecting square stones like those usually called *intihuatana* stones. Seven of them in a line have been carved out of the face of the rock. The *intihuatana* stones are about 8 in. square. No two of them are exactly alike. It must have required great labor to carve these out of the flat face of the rock 12 ft. above the water. If the projecting stones were intended to cause a shadow, it is significant that they were placed on the north side of the rock where they would always be exposed to the sun. On the west side there are more seats and large steps. On top of the rock there is a flattened place which might have been used for sacrifices. From it runs what looks like a little crack in the boulder (local tradition says this mark was made by a little princess) which has been artificially enlarged. It is possible that this was intended to drain the blood of the victim killed on top of the rock. This shows in several of the photographs, as rain-water flowing down this crack has kept moss from gathering there as it has gathered over most of the monolith.

The surroundings are impressive. Densely wooded hills rise on both sides. It is a secluded spot, well calculated to impress the imagination of the worshippers. There seems to be no doubt that this was a sacred place. Furthermore, as I have said, about one-fourth of the boulder overhangs a spring of clear water. Surrounding this are the ruins of houses, probably the House of the Sun, once occupied by the priests who officiated at the ceremonies described by Father Calancha in his *Chronicle*. The important thing to us in this connection is that he said: "*Joined to Vilcos is a village which is called Chucipalpa, and a House of the Sun, and in it a white stone on top of a spring of water, where the Devil appears in visible form and was adored by these idolators, this being the principal mochadero of these mountains.*" The locality where we found the monolith is called Ñusta España or Yurak Rumi and is also known as Chuquepalta.

